THE UNIVERSITY OF ALBERTA

A SEMIOTIC EXPLORATION OF CLASSROOM SEMIOTICS

by

© Florence Irene Danyluk McKie

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF ELEMENTARY EDUCATION

EDMONTON, ALBERTA

FALL 1985

THE UNIVERSITY OF ALBERTA

RELEASE FORM

Florence Irene Danyluk McKie

A Semiotic Exploration of Classroom Semiotics

Doctor of Philosophy

1985

Permission is hereby granted to THE UNIVERSITY OF ALBERTA to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Florence McKie

(signed)

15213-81 Avenue
Edmonton, Alberta, Canada
T5R 3P2

May, 1985

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled:

A Semiotic Exploration of Classroom Semiotics

submitted by Florence Irene Danyluk McKie in partial fulfilment for the degree of Doctor of Philosophy.

Daiyo Sawada

Supervisor

David Dillon

Margaret McKay

Maxine Greene

Date May. 23, 1985. External Examiner

DEDICATION

To my parents

Anna Kolodka Danyluk
born 1911 in Dunkowice, Jaroslaw, Poland
and emigrated to Canada in 1929

and

Nykola Danyluk
born 1903 in Knaize, Sniatyn, Ukraine
and emigrated to Canada in 1922

Their lives continue to be
an exemplary sign
of the dignity of hard work,
of love and compassion for others,
and of an abiding curiosity
in all that the world has to offer.

ABSTRACT

A Semiotic Exploration of Classroom Semiotics

Classroom life and pedagogical growth is dependent on the communication created, shared, and sustained between teacher and children. This study is an in-depth interpretation of the pedagogical relationship between a grade-four teacher and her twenty-seven students as it evolved from their verbal, nonverbal, spatial, and relational sign systems. While all human communication may be regarded as semiotic, that is, based on an intricate and mutually understood, accepted, and used sign system, classroom semiotics has a distinctive quality because of the nature of the school as a social agency for the transmission of knowledge, values, and the attitudes and behaviors that mark good citizenship.

The semiotics of the classroom is interpreted as "general semiotics" rather than "specific semiotics", a differentiation made by Eco (1984). It is not considered an explicit analysis of the patterns of language, gesture, or action used by the teacher and the children, but rather an exploration of how meaning is created in the pedagogical setting as part of the livingness inherent in the teacher-children relationship. Consequently, the interpretation of classroom semiotics goes beyond what "semiotic" is to what it means to be a semiotic being, and how the classroom as a whole functions as a semiotic entity. This, in turn, gives access to the broader meaning of the pedagogical relationship created between teacher and children.

The research design is semiotic in nature, based on intricate and mutually understood sign systems; that is, on a deliberate and explicated use of audio and video recording of classroom interaction, teacher interviews, informal conversations with the children, and on structured interviews with both teachers and children based on video scenes of their classroom activities. Approximately 120 hours of observation (September-May, 1984) form the basis of analysis.

Two concepts have evolved that have proven invaluable in the identification and interpretation of human interaction: discernible moments--semiotic keys to meaning, as signs in themselves, and as embodying signs for further analysis, and experiential texts--textual identification, allowing for semiotic differentiations in the source and interpretation of meaning.

The semiotics of the classroom is complex and pervasive. Three main themes emerge from the analysis:

1. spatial semiotics --the meaning implicit in classroom space, children's desks, teacher's use of space, and in pedagogical space within the classroom and beyond it,

2. semiotics of interpersonal relationships --the meaning children and teacher give to each other as members of a group engaged in pedagogy, including a semiotic analysis of various types of students, i.e., the non-achiever, the quiet child, the exemplary student, the unrecognized gifted child, and the child facing academic difficulties for the first time, and

3. semiotics of pedagogy --the meaning ascribed to various methodologies as influenced by interest, animation, concentration, and variation in lesson design and presentation.

The semiotic exploration of the semiotics of the elementary classroom is an original approach that illuminates the dialectical influence that is implicit, yet undervalued, in the pedagogical relationship. By "reading" the signs embedded in the language, action, and attitude of the teacher and the children, there is much to be learned about how pedagogical meaning is nurtured or thwarted in the classroom.

PREFACE

By holding this dissertation and reading what it contains, you are participating in semiosis--a process created by and interpreted by signs. You are now perceiving and interpreting signs. By mental activities we can only speculate about, these arbitrary symbols arranged left to right, line after consecutive line, take on meaning. They are semiotic. These letters, words, and sentences are signs which function as carriers of meaning. Each one is a signifier, standing for ideas which we can share in no other way. For those who read the English language, these ideas are presented here in a familiar format, the collective representation that we know as the English alphabet.

This dissertation is then a symbolic translation insofar as it carries, through the signs used here, the description and interpretation of my experiences as a researcher in elementary classrooms. As a sign, it is a giving, a beginning, a link from my world into yours. For as St. Augustine's definition of sign states:

> A sign is a thing which, over and above the impression it makes on the senses, causes something else to come into thought as a consequence.
>
> (Recorded in the Fourth Book of Peter Lombard's Sentences, c. 1150 B.C. and cited in Deely 1982:18)

Much of the theoretical orientation for this dissertation is based on the work of C. S. Peirce originally published between 1867 and 1914. His theory of signs forms the motherlode of contemporary semiotics, particularly in North America. However, the history of semiotics has been traced in philosophical discourse dating from Zena of Elena c. 464-460 B.C., through the ancient Greek and Roman world, and in sacramental theology of the 12th and 16th centuries. Locke, in 1690, added the term semiotic when making a distinction which has fascinated philosophers for centuries: between what exists in nature, en reale, and what exists independent of nature in the mind of man, en rationis. Locke formulated the study of this shifting reality and what makes it possible as semiotics (ibid.:64).

In reading this dissertation, you are participating in that shifting reality, in that shifting line as semiotics. In Peircean terms, you are held before the sign, the representamen (the dissertation as a document), the object (the world of elementary classrooms, and the research process

I undertook), and the interpretant ("the whole semantic context necessary in order that a particular relation of the object of the sign makes sense" Maquet: 1982:2). Together the sign or representamen, the object or what is signified, and the interpretant form the signification, the meaning created through the symbolization of thought.

Following Morris's (1946,1964) extension of Peirce's work, it is possible to move from the purely logical triadic relationship of sign-object-interpretant, or the subject-object-thought pattern, to include both the interpreter, the person responding to the sign (i.e. you as reader), and the context, the whole situation in which the sign occurs. Here, the context is of course twofold: the context created within the dissertation itself and the context which you bring as a personal insight into its reading.

This introduction is intended to demonstrate the fundamental premise of my work: the simultaneously interactive nature of the content of my research and the form or style of my approach to studying that content. The content of my study is the semiotics of pedagogy--the multi-varied sign systems that are created, implicitly and explicitly, between a teacher and her class in their daily pedagogical interactions. The form of my study is a semiotic exploration which deliberately uses and interprets signs as a means of gaining interpretive access to how the teacher and the children create meaning in the classroom. The documentation of that semiotic exploration of the semiotics of the classroom becomes, in turn, a semiotic experience for the reader who brings to this semiotic interpretation his own semiotic history and draws from it his own semiotic understanding of the pedagogical experiences described.

Ultimately, this dissertation is semiotic. It is a sign that stands for something other than itself. It stands as a beginning for a deeper understanding of the pedagogical process. It is, as Hervey states, "a preparatory stimulus setting up a disposition...a certain specific expectancy" (1982:41). May the words of this dissertation create "resonances in your mind", and may there be a semiotic "richness of connections" between us (Deely 1982:80).

ACKNOWLEDGEMENTS

My indebtedness can never be fully conveyed in words. It can only be returned in kind--as a totality of being. What I am now as an educator is what I have become because of the inspiration, guidance, and trust that many have given me, not only as visible acts but as an enduring faith in my ability to contribute to education. During the 1950's, Dr. Andrew Doucette, Dr. Theo Finn, and Dr. Earl Buxton, at the then Calary Branch of the University of Alberta, were particularly influencial in capturing for me the excitement inherent in the education of children and in emphasizing the necessity of teachers' ongoing education.

During 1958-63, Dr. Marion Jenkinson and Dr. Dorothy Lampard, at the University of Alberta, added to my appreciation that research in education had to deal with the real world of the classroom but took its strength from a sound theoretical background. Dr. Brigham Card extend my awareness of the school as a profound social agency, affecting and affected by the complexities of society yet having to hold certain values above the often difficult resolution of day-to-day problems.

From 1977 to 1982, Mr. Alex Romaniuk, principal extra-ordinaire, gave me an opportunity, rare in education, to create a curriculum for a group of gifted young children, and to enjoy teaching as never before. His kind of trust, support, and inspiration should be the right of every teacher and every child.

Returning to graduate work after some twenty-years, I welcomed the panoramic breadth of knowledge that Dr. Bruce Bain brings to education and, especially, his interest in semiotics. His encouragement throughout has been vital. I thank Dr. Max Van Manen for numerous opportunities to explore the mysteries and value of the phenomena of life. Dr. David Dillon, who along with Dr. Sawada and Dr. Bain formed my dissertation advisory committee, brings a perceptive eagerness to education that keeps inquiry ever-new and self-reflective.

This dissertation took its shape largely because Dr. Daiyo Sawada, my dissertation advisor, once said, "I think you're on to something important here." My gratitude to him is profound, for nowhere could I have found a more enthusiastic and perceptive mentor. Through my struggles, uncertainties, and discoveries, he provoked questions (many of which I never will be able to answer) that confirmed for me the exciting possibility of using semiotics as an interpretive lens in educational research. "Dialogues with Daiyo" were semiotic explorations (with many discernible moments) into the achievements of mankind as these relate to and affect education. It is a rare privilege to have engaged in such a valuable and valued dialectical relationship. For this, Dr. Sawada will always have my gratitude.

I would also like to thank Dr. Margaret McNay for her ongoing encouragement, for her many insightful suggestions, and for her sensitivity to the implications of my research for teachers and children.

I am grateful to each and every one of these academic mentors. Because of them, I found tantalizing new horizons in education and a richer understanding of what it means to be a teacher, and how resolving the intriguing tension between what is known and what is yet to be discovered can be an endlessly rewarding experience.

There is a particular poignancy inherent in bringing one's research to a conclusion end and placing it as a documentary text before others. That Dr. Maxine Green (during her major commitments to the International Human Studies Research Conference at the University of Alberta) agreed to be my external examiner crowned that experience in more ways than my words can express. Her erudition, perceptiveness, and powerful expressions of intense concern about pedagogy are truly an inspiration to those of us involved in education and its infinite variations.

Behind the veil of anonymity are the eight teachers and some two hundred children I observed during my exploratory study, and one very special teacher and her twenty-seven students who let me into their lives for a good part of their school year. I thank them all most sincerely for their willingness to be involved, for their honesty and insight, and for their interest and support.

With profound gratitude, I acknowledge both the example my father set as he studied by a low single light the fine onion-skin pages of a leather-bound book, and the endless opportunities my mother created over the years that I might take up my own studies. I thank my sister, Vicky Burton, for her empathic encouragement, and my brother, Dr. Michael Danyluk, for his pragmatic wisdom. My husband, Ken, and my daughters, Heather, Katherine, and Dana have my deepest appreciation for accommodating to the time and personal space that I needed for this undertaking. Theirs too was an act of faith.

TABLE OF CONTENTS

VOLUME I

I. THE DESIGNATUM 1

The Challenge: A Semiotic Exploration of the Semiotics of an Elementary Classroom 11

Theoretical Background 17

Theoretical Orientation to Semiotics 17

Definition 17

Excerpts from Peirce's Theory of Signs . . 21

Pedagogy as a Semiotic Process 28

Uexkull's New Paradigm of Semiosis 35

Meaning and Symbolization 41

Pedagogical Meaning 50

Research Design as a Semiotic Framework 55

Researcher's Intentions 55

Research Design 58

Collections of Impressions of Experience . . . 63

The Exploratory Study: A Synopsis 64

The Major Study 67

The Interactive Context 68

The People 70

The Researcher 70

Contextual Links 71

Research as a Semiotic Process 73

The Semiotics of Research Tools 75

Research Related to the Peircean Hierarchy of Signs 81

The Discernible Moment as a Semiotic Key to Interpretation 85

The Interpretation of a Discernible Moment 85

The Challenge of Recognizing a Discernible Moment. 101

II. THE SIGN: THE SEMIOTICS OF AN ELEMENTARY CLASSROOM 111

The Spatial Semiotics of an Elementary Classroom 118

The Semiotic "Weight" Given to Classroom Decor 129

Classroom Walls as Semiotic Spaces . . . 129

Children's View of Classroom Objects and Displays 148

The Choices Children Make Related to Classroom Objects 148

What the Children Imagine Their Teacher Values in the Classroom. 152

The Semiotic Significance of Children's Desks . 159

A Child's Desk as a Personal Semiotic Focus 159

Three Semiotic Layers Associated With a Child's Desk. 164

Children Finding a Semiotic Space Beyond Their Desks 175

The Teacher's Space as a Semiotic Dimension. . 182

The Semiotics of the "New" Child 200

A View from Those in the Classroom . . . 202

A View from the Child Entering the Classroom for the First Time 206

A View from the Teacher's Side of the Desk 212

Lessons Outside the Classroom as Different from Those Within: An Extended Pedagogical Space . . 217

Diorama as a Metaphor for Pedagogy 235

Elementary School Libraries as Semiotic Centres 257

The Significance of the Spatial Semiotics of the Classroom 271

The Semiotics of Interpersonal Relationships in a Pedagogical Setting 275

Children's Semiotic Understanding of Other Children 280

Children's Language as a Semiotic Relational Link to Others 286

The Semiotics of Children's Relationship to Pedagogy 297

The Semiotics of Children Talking Together 304

The Semiotic Undercurrent of Children's Relationships 308

The Semiotics of Children's Private Lives . 314

The Semiotic Power of Children's Groups. . 319

The Semiotics of Children's Caring . . . 321

Children's Semiotic Understanding of Their Teacher. 326

The Semiotic "Reading" Children Give of Their Teacher 327

Semiotics of a Teacher's Face and Action . 335

The Semiotic Importance of Eye Contact . . 342

Children's Empathic Understanding of Their Teacher 345

The Implications of Being "Called" by the Teacher 351

Raising Your Hand: Semiotic Permission or Denial? 357

The Semiotics of Marking Children's Work . 365

The Fluidity of the Semiotics of Teacher-Children Interpersonal Relationships. . . . 375

The Semiotics of A Teacher's Interpretation of Children in Her Classroom. 378

The Teacher's Interpretation of Individual Children: Children's Characteristics as Semiotic Descriptors 378

Semiotic Affinity or Lack of It Between the Teacher and Certain Children 386

VOLUME II

Cameos of Individual Children as Semiotic Types 407

Brian: The Child Who is Not Achieving . 411

Marnie: The Exemplary Being in the Classroom 422

Rob: The Enigma of the Quiet Child . . 425

Danny: The Unrecognized Gifted Child? . 432

Nancy: A Change in Self-Image as Semiotic Trauma 439

The Class as a Semiotic Whole 447

The Significance of the Semiotics of Interpersonal Relationships in Pedagogical Settings. 465

The Semiotics of Specific Pedagogy 479

The Comma Lesson: Basic Skill Development . . 487

Haiku Writing: A Semiotics of Difference. . . 499

Media in the Elementary Classroom: Extended Semiotic Horizons 506

The Socio-Semiotics of Social Studies. . . . 539

Reading As a Shared Semiotic Experience . . . 573

The Significance of the Semiotics of Pedagogy . . 609

Pelc's Semiotic Quadrangle as a Guide for Interpreting Pedagogy 611

The Semiotics of the Pedogogical Process. . . 617

Pedagogy Interpreted by Peirce's Functions of Sign. 621

The Interlinking Semiotics of Pedagogical Meaning. 628

The Critical Significance of the Semiotics of the Teacher 632

The Power of Icon, Index and Symbol in Pedagogy 633

The General Semiotics of Pedagogy 638

The Semiotics of Delay Defeating Pedagogy . . 641

The Power of the Semiotics of Communitas in Pedagogy 643

III. THE INTERPRETANT: THE SEMIOTICS OF THE RESEARCH PROCESS 647

Human Experience as Text: An Interpretive Mode . . 649

Experience as the Genesis of Text 655

From Experience to Text 656

Experiential Texts 663

Embedded Text 664

Actuality Text 665

Commentary Text. 668

Reflexive Text 670

Documentary Text 671

A Sample Sequence of Working With Experiential Texts 672

The Value of Experiential Text Differentiation 676

Video as a Semiotic Experience-Maker 690

The Semiotics of Film. 692

The Video Camera as Participant-Observer . . 694

Children's Curiosity About Video Technology . 698

Children's Awareness of Camera and Self. . . 705

The Forgotten Rights of Children as Video Subjects 720

Video Taping Children Acting as "Teachers". . 722

Teachers "On Camera" 725

Challenges During Video Taping. 729

Researcher as Cameraman. 730

Filming and the Selection of Shots. . 731

Ethical Consideration During Filming . 736

The Technicality of Time and Place. . 739

The Challenge of Video Analysis 742

Semiotic Significance of This Study as a Dialectic of Pedagogical Content and Research Design . . . 751

BIBLIOGRAPHY 767

APPENDICES. 786

ILLUSTRATORS

Tables

1. Sign Functions and Example 22
2. Interpretant Examples. 24
3. Pedagogical Experience as a Semiotic Process Using Multiple Sign Systems. 32
4. Research as a Semiotic Process Expressed in Peirce's Hierarchy of Signs. 81
5. Teacher-Described Children's Traits 385
6. Research as a Semiotic Process: Experience and Text. 757

Figures

1. Grimaud's Semiotic Overview. 19
2. Pelc's Semiotic Quadrangle (Adapted). . . . 31
3. The Semiotic Search for Pedagogical Meaning as a Semiotic Process 50
4. Focus of the Search for Pedagogical Meaning . 60
5. Perspectives From Which Pedagogical Meaning Has Been Interpreted 61
6. Interactive Context for the Analysis of Pedagogical Meaning 69
7. Semiotic Research Techniques Used in the Collection of Experiences and in the Creation of Experiential Texts. 74
8. Semiotic Traces of Dialogue and Experience As Potential Texts. 653
9. Texts Evolving from Human Experience (From the Perspective of the Researcher) . . 684
10. The Semiotic Compatibility of Research and Pedagogy as Semiotic Processes. 754

Appendices

1. Information Letter to Parents 787

2. Permission For Pupils' Participation. 789

3. Teachers' Confirmation for Research Schedule . 790

4. Kindergarten Observation and Video-Tape Analysis (Children in Free-Play). . 791

5. Transcript: Video-taping of Kindergarten Girl Acting as Teacher (Miming Own Teacher) . . . 795

6. Transcript: Video-taping of Grade Three Girl Acting as Teacher (Reprimanding a Boy) . . . 797

7. Transcript: Video-taping of Grade Six Girl Acting as Teacher (Assisting a Pupil, and Assigning and Directing Groups). 800

8. Transcript: Video-taping of Grade Six Boy Acting as Teacher (Concept Teaching) 802

9. Transcript: Video-taping of Grade Six Boy Acting as Teacher (Nonverbal Semiotics of Praise and Disapproval) 806

10. Transcript: Conversation with Grade Four Girl (Her Reaction to Acting on Video as Teacher) . 808

SEMIOTIC CODES

There are many excerpts from audio and video transcripts used in this dissertation. These are fundamental to the interpretation of the semiotics of an elementary classroom. It is important, however, that the source of these excerpts be designated because my interpretations stem directly from what the teacher and the children said or did during their classroom activities or in conversations with me. In order to differentiate their voices from my own, a semiotic code has been designed:

[......]	Indicates my voice as researcher, frequently in the form of questions or comments related to what others say. Also used, embedded in others' dialogue, when the impression I accredit to the matter might not necessarily be confirmed by other observers, i.e. a subjective interpretation.
(......)	Indicates parenthetical comments made by the person speaking, and occurring during dialogue.
{......}	Indicates accompanying physical action, gesture, or facial expression. May be non-verbal and self-referential, or directed to others.
***	Indicates, in a sequence of uninterrupted transcripts, that the speaker has changed. Because the majority of

> conversations and interviews were with individuals, a different time and place is implicit in the different quotations given unless otherwise explained.

Following the ethics of confidentiality, all children and teachers referred to in this study are represented by randomly chosen pseudonyms. The pseudonym of each person whose conversation is quoted has been inserted at the beginning of the statements. When no new name is given, the implication is that the same person continues to speak, or that the conversation occurs turn-after-turn between the two persons initially named.

Further, it will be noted that there is considerable stylistic variation in the presentation of lessons in "The Semiotics of Specific Pedagogy" (infra.:480). In each case, the format is intended to be in semiotic harmony with the content under discussion.

Finally, the dissertation is written in a personal style rather than in a formal, objective one. This is a reflection of my preference, and a semiotic reminder that the interpretations and analysis are never far from my perceptions nor from those of the teachers and children involved.

Our conversations were between people, and not specifically for this dissertation. The personal pronoun, whether used by me or by persons sharing their thoughts with me, is intended to keep the reader in their context as much as possible. Similarly, most of the references to the children and teachers are identified by their pseudonyms. Where broader generalizations are discussed, these names are put aside and the truly amorphous "they" take centre stage. But for every "they", there is a lively group of chattering children and reflective teachers who brought the essence of that generalized meaning forward for our consideration.

Finally, each child and each teacher retains his or her sexual designation--the "sign" under which they live in the classroom. They are as they are, with dignity and self-identity.

I. THE DESIGNATUM

This study, a semiotic exploration of the semiotics of an elementary classroom, is cast in the light of the concepts of semiotics, of sign systems that have particular meaning for a group of people who understand and use a broad spectrum of signs to communicate with one another. The writing of this research must therefore take a form that effectively translates the lived experiences observed in the classroom into a document that honours, as much as is possible, the integrity of that pedagogical interaction and the trust and commitment of those who have been involved. The final documentation must be a condensation of pertinent examples and an explication of the fundamental themes that emerge from analysis and interpretation.

Meeting these standards (often implicit) is never a simple undertaking. Life experience does not categorize itself; that is the task of the researcher. Consequently, the structure of the documentation of this study has been deliberately derived from one particular semiotic interpretation--Pelc's Semiotic Quadrangle (infra:31) which includes the author, the sign, the designatum of the sign, and the interpretant of the sign. This differentiation is relevant for analysis but does not exist as separate entities in the flux of normal communication. There, it takes on a simultaneity whose emphasis lies on the meaning of the exchange rather than on components that comprise that meaning. Since no documentation of human experience can convey the fullness of the semiotics shared, it too must take the form of separate elements that, ideally in the mind of the reader, blend again into a synchrony of the original experience.

By using Pelc's Semiotic Quadrangle, it is possible to organize the theoretical background of semiotics, the observations of classroom pedagogical relationships, and the interpretation given by me to the analysis of those experiences, into a framework that echoes what occurs in semiosis--in the creation of meaning between human beings. Three major divisions are explicit; the fourth is implicit.

The implicit includes the author(s) or creator(s) of signs (the teacher and the children of her class who through their ongoing activities and conversations with me provided explanations and insights into their classroom experiences). Much of the interpretation of the semiotics of pedagogy is based directly on their words and actions. As described elsewhere (infra:663), they provided the embedded and actuality text: the original interactive exchange from which signs (words, gestures, attitude, and action) are drawn to explicate meaning beyond what has been or could be expressed explicitly. They also have provided what is called the commentary or reflexive text: explanations about and extrapolations arising from their separate experiences. Their contributions are identified in the numerous excerpts included in this document. These are to be understood as critical to the interpretation of semiotics of pedagogy and appear under the teacher's pseudonym, Mrs. Wayne, and that of the children in the text.

Authorship also includes my voice. The documentation here is my interpretation of the totality of experiences I was able to observe and record. It is customary to claim responsiblity for what appears in print under one's name but there is an implicit reflection of the semiotic process in this gesture. What is observed, selected as relevant from those observations, and analyzed and interpreted is intimately tied to an author's interest, intent, and ability to coelesce from a mass of information, an understandable and important synthesis. My voice then gives a semiotic particular quality or character to this document. While others might arrive at similar choices and interpretations (and I have endeavoured throughout to indicate how this might be accomplished), there is a personal filter and a personal style that determines the emphases and extension of meaning conveyed in this text.

The authors of pedagogical semiotics whose voices are heard in this study at both the experiental and interpretive level, having made their role clear, will now subsume their presence in the document except as it rings through the text on its own power.

The three other major perspectives of the semiotic quadrangle take their place explicitly as divisions of the text: the designatum, the sign, and the interpretant. The Designatum, as described by Pelc and others, is that fragment of reality that is referred to by the sign, the epistemological and cultural understanding that the sign carries with it as it stands alone and, more importantly, as it appears in a given context, as en rationis. It is the distinctiveness that separates the meaning of one sign from another: the semiotics of difference. It is the source from which understanding is to evolve. The designatum is both the quality of the sign itself, its history and permutations through time and the range of understanding that those using the sign bring to it--its contemporary and contingent meaning in the context of the lives of those who receive, create, or modify the meaning of that sign. The designatum is the aura of meaning that surrounds a given sign, as it is understood in the language and behavior of those who accept that meaning as a part of their lives. If there is no designatum, the sign is without meaning. As Peirce writes, a sign must have meaning for someone before it can function as a sign of any relevance or purpose.

The concept of the designatum has been used as a foundation for the background of this study. The term has been chosen for this first section because here I attempt to set out a theoretical orientation for the semiotics inherent in my research design. The interconnectiveness of semiotics and meaning is emphasized as a way of life in which communication is imperative. In one sense, this discussion sets the historical horizon against which my research stands. Further, the description of my research design provides the context from which my analysis is drawn, an important dimension in highlighting and delimiting the understandings that can be taken from the analysis. This is the story of pedagogical relationships and their meaning as told by the teacher and the children and as I have interpreted that story. There are two sources that provide the story of semiotics in the classroom: my exploratory study which involved observations in eight elementary classes (kindergarten to grade six) and the major study which centred on a single grade four classroom over an eight-month period. While the study does have wider implications, it is a story that has distinctive qualities because of its source.

Included in the designatum of the study is a discussion of the concept of "discernible moments" (as I have formulated it during the semiosis of my research) as a basis for selecting certain experiential incidents for further interpretation. This provides the context from which I draw my understanding of the pedagogical process. Using the notion of the discernible moment is a highly subjective act. Again, while I have indicated the pertinent signs within the experiences that drew me to seek further understanding, the choice of words, actions, or attitude from which that understanding grows is predicated on my personal response to the situation. This becomes my contribution to the designatum, to the meaning the sign (the classroom and the teacher) now carries. Ideally, that meaning will become part of the reader's designatum in understanding pedagogical meaning in the context of his own experience.

The final aspect of the designatum of this study is a projection of the value of this type of research for educational research and practice. This completes the circle: the signs originally "read" as they occurred in the classroom (and here interpreted from a semiotic perspective) become part of a greater understanding of the pedagogical process. If the interpretation is accepted as potentially valid, the signs and the way in which they were identified and their meaning illuminated become designatum for future interpretation.

The second major section of the study is designated as The Sign. Here, excerpts from ongoing classroom activities and from teachers' and children's commentaries are presented as the signs which, for me, stand for something important in the pedagogical process. What was said and done and reflected upon became the "text" which I took to envelop broader pedagogical meanings. Three separate thematic outlines have emerged from the semiotics of the classroom and their explicit and implicit meanings: spatial, relational, and pedagogical.

Spatial semiotics focuses on the meaning attributed to classroom space and decor, to the children's desks, to the teacher's use of space within the classroom, and to the impact of conducting pedagogical experiences within the confines of a classroom or leaving that site for others. It deals with the semiotic meaning that children attribute to concrete experiences as compared with experiences emphasizing exclusively abstract discussions. Classroom and the school libraries are considered to be essential semiotic centres with potentially powerful influences on children's attitudes toward learning and on their access to information in a variety of formats and modes.

The semiotics of interpersonal relationships is taken as another sign of the pedagogical process. The way in which teachers and children respond to each other in formal and informal situations, during transitions and interludes, and during group and independent assignments reveals the values and expectations each hold about the pedagogical process and their role in it. A series of cameos of individual children is presented as an example of how the signs that children emanate can influence the teacher's perceptions of their personalities, attitudes, and abilities. These cameos include descriptions of a child who is not achieving, an exemplary student, the engimatic quiet child, an unrecogized gifted child and, finally, a child facing difficulties in school for the first time. The emphasis in this section is on the recognition of signs of behavior, language, and attitude that, if consciously sought, add to the designatum of each child and become part of the teacher's repertoire in understanding the child as a person and in meeting his pedagogical needs.

The semiotics of pedagogy involves all the sign systems that are inherent in the preparation, presentation, and culmination of specific pedagogical experiences; that is, all the modes of communication that make a given lesson or learning situation possible. These include a teacher's own communicative patterns as given via language, appearance, behavior, attitude, and personal attributes as well as through the teacher's choice of methodologies, the characteristics of the subject matter to be taught, and the resources brought forward to elicit and enrich learning.

Further, the semiotics of individual children and of the class as a whole interact continually with the semiotics of the teacher. These in turn create and are created by children's (learners') anticipation of, participation in, and success in the pedagogical exchange. These pedagogical sign systems have a particular potency insofar as they can significantly influence not only the degree of learning that can or will occur but also the total well-being of the learners over time.

The final section of this study is called The Interpretant. In Pelc's terms and derived directly from Peirce, the interpretant is the totality of meaning that arises from the sign in context. It is the meaning that enriches understanding in the flow of human interaction and is derived, simultaneously, from an appreciation of the author of the sign, the designatum of the sign, the distinctiveness of the sign itself, and the context in which these merge into meaning. In its wholeness, the interpretant removes the stitches that have been created in binding the elements of the semiotic quadrangle together during examination. It is the consolidation of interlocking experiences that leads to a total understanding, to a new link into the future. The interpretant draws the past into the present, and the present into a pause before the future.

The term "interpretant" has been given to the last section because it is here that, as a researcher, I look back upon the entire research experience and reflect upon its meaning and on what it can contribute to our understanding of the pedagogical process when it is viewed from a semiotic point of view. Because the research design was pivotal from the beginning--a semiotic exploration of how teachers and children use semiotics for pedagogy--the interpretant must deal with both the content of the study and the processes by which the interpretations were made. The concept of human experience as "text" forms the basis for this summation. Experiential texts are described as the interpretive mode that differentiate the source and explication of meaning. This concept in turn involves the reader in a dialectical and semiotic relationship with the dissertation as a documentation of human experience. The significance of the study evolves from the continual interplay of semiotic analysis of content and the semiotics of the research process itself.

What began as unencumbered human experience--the life of the teacher and children--subtly changed with my presence as researcher in the classroom. Ordinary pedagogical meaning was "watched", "observed", "interpreted", and changed into "reflexivity". However, it is only in this process that their pedagogical meaning becomes accessible to others. The process has been semiotic--an intricate symphony of signs playing one with the other, one against the other in a way that (I hope) leads to a new appreciation of the resonances of meaning that occur in all human interaction but particularly as they occur in elementary classrooms.

The Challenge:
A Semiotic Exploration of the Semiotics of a Classroom

Intrigued by the possiblity of using a semiotic approach to study pedagogical meaning in elementary classrooms, I began exploring literature in the field. The more I read, the more I felt that I had been given a gold key, one that not only fit my past experiences but one that could also open exciting frontiers in my understanding of the pedagogical process. I have long been fascinated by the power and elusiveness of language, by the proliferation of visual and nonverbal forms as conveyors of implicit as well as explicit meaning, and by the inherent possibilities of symbolic analysis of literature, art, and film. Through semiotics, I could link these interests with my equally long involvement in education.

I had expected to find a great deal of educational research with a semiotic orientation; I found virtually none.

> The potential of a semiotic approach to the study of education has yet to be realized... including [its application to] problems of educational methodology, implications for a coherent theory of learning, cognition as semiosis, and the notion of curriculum as a semiotic phenomenon.
>
> (Carey 1983:13)

I find this neglect, indifference, or reluctance toward accepting the possibility of exploring a semiotic approach in education surprising, even disturbing. For as Peirce believes, man's life is enveloped in symbolic forms. Society decrees that schools shall instruct children in the mastery of symbolic forms: reading, writing, and arithmetic; art, music, and drama; physical education, social studies, and science; each with its unique and complementary sign system.

If semiotics is not seen as a golden key to educational research, then surely it is a sturdy iron one, opening the way to look at how meaning is conveyed through and beyond language, at how words, objects, people, places, and situations interweave and ultimately make sense. For what is education but the creation and sharing of meaning through sign systems? How do teachers and children understand one another except through semiotics? The challenge then is to bring to educational research an approach that can encompass, as much as possible, the dialectical interchange that occurs in the ongoing and intersubjective activities of the classroom. The challenge is to see the pedagogical process, not as a series of fragmentary actions examined in isolation or in the light of one theoretical construct or another but as integral, inseparable experiences between human beings. This totality includes the teacher, the children, the worlds of meaning they draw upon, the worlds of meaning they create, and all the communicative modes they use to accomplish this.

In using a semiotic approach to explore pedagogical meaning in the classroom, I am making a bid for a way of looking at communicative modes used by the teacher and the children as the very foundation of the educational process. For where does "education" come from? Upon what does it build? Typically, we look at what occurs in the classroom and judge it as educationally valid or not. However, what we interpret is often the ornamentation of the teaching-learning process rather than its essential core.

The appeal of using a semiotic approach for an exploration of the semiotics of a classroom comes from its untried but exciting potential for educational research. More than any other methodology, semiotically-based research may empower us to take an unjaded look at what is occurring in classroom contexts and to enhance our understanding of the educational process.

> Man lives in an atmosphere where symbolization--the use of signs to represent things--is constant and unrelenting....

> Symbolization, or representation, is neither optional nor fortuitous. It is this symbolicprocess, however artificial and contrived it may be, which makes communication possible and pragmatic.
>
> (Steinberg 1970:17)

The role of the school in the transmission of the multiple sign systems or symbolization cannot be disputed. However, although semiotic research enjoys recognition in fields as diverse as architecture, medicine, cinematography, fashion, folklore, folk costume and artifact designs, and tourism, its application in education has been almost exclusively limited to linguistic and literary analysis, particularly at high school and post-secondary levels.

In this area, Bleich (1978) presents perhaps the most insightful analysis of the use of semiotics in pedagogy and of the need for a sensitivity to the students' own semiotic evolution in the process. More recently, Suhor (1984) outlines the basis of a semiotically-based curriculum and urges for the explicit inclusion of semiotics as an area of study. He presents a model that begins with an "Experimental Store" that is posited as existing within each human being as a vast undifferentiated, indeterminate, and unsymbolized and, therefore, pre-semiotic repertoire of potential meanings. Through what he describes as "alternative signs/sign systems" which include linguistic, gestural, pictorial, musical, constructive, mathematical, and other modal possibilities, Suhor believes the curricula could be restructured in aninterdisciplinary way to enhance the students' independent thought and achievement.

Regan (1984), in an international study of teacher discussion patterns, has identified an apparent semiotic commonality of phrasing, praise, and terminating sequences regardless of the language of pedagogy being used. Coenen (1983), in a fascinating study of deaf children integrated into kindergarten classes, examines the phenomenon of non-verbal communication between the children. While this study is not termed a semiotic analysis and does not use semiotic terminology, it does demonstrate the same interest in multiple communicative modes as semiotic research does. Indeed, vast numbers of research studies might benefit from a reconsideration of their data from a semiotic point of view.

My own concern is primarily in the application of semiotics as an interpretive mode, as a way to better understand the complexities of the pedagogical process. In order to move toward a recognition of the value of semiotics in pedagogy and toward a distinctive research paradigm, two intertwining strands must be considered--semiotics and meaning. While it is necessary to discuss these separately to emphasize their relevant importance in pedagogy, they are best regarded as the two sides of a spinning coin.

The issue I have explored in this dissertation is "How does the classroom mean?" and "What is it like to be a semiotic being in that classroom?" As meaning-makers, how do teachers and children create meaning? How do they ensure that others do understand? What many and varied ways do they use to create and share meaning? As a researcher exploring these questions, I too am a semiotic being. I bring my teaching experience, my language, my intuition, my video-camera and taperecorder. I must use a variety of sign systems to recognize the semiotics of a classroom. There is no other way.

As Barthes, Levi-Strauss, and Ricoeur differentiate between what is said, what is written, and what is read, so my role as researcher has been that of "reader", reading from the dynamic interrelationships of teacher and children the semiotic traces (said, written, and lived) they create within their pedagogical experiences. Where I have been able to understand the fullness of their experiences, I have experienced a richness too, a moment of understanding in what I have called a discernible moment, a moment when my semiotics links closely with theirs (infra:85). In those discernible moments, I found a key to begin a semiotic exploration of their shared pedagogical meaning.

Theoretical Background

Theoretical Orientation to Semiotics

> The world is my representation: this is a truth valid with reference to every living and knowing being, although man alone can bring it into reflective, abstract consciousness. If he really does so, philosophical discernment has dawned on him. It then becomes clear and certain to him that he does not know a sun and an earth, but only an eye that sees the sun, a hand that feels an earth; that the world around him is there only as representation, in other words, only in reference to another thing, namely that which represents, and that is himself.
>
> (Schopenhauer 1969)

Definition

Semiotics is the study or the science of signs and symbols. It is divided into pragmatics (the use of signs and symbols in the practicalities of communication), syntactics (linguistics structures and relationships), and semantics (meaning relationships). It is the study of sign phenonmena. The process by which meaning is attributed to something that functions as a sign is called semiosis. Semiology is the science of signs with an emphasis on their logical relationships. Broadly, this is the context in which semiotics is used although differences in definition, scope, theoretical foundations, and contemporary applications vary considerably. Eco (1984) differentiates broadly between "general semiotics" which is concerned with the multiple ways communication is possible in life-experience and "specific semiotics" which is concerned with specific codes and how they function explicitly, e.g., linguistic analysis, described by Silverman (1983) as the most orthodox of semiotics.

The description that is most relevant to the exploration of semiotics in pedagogy is:

> Semiotics as a science or a doctrine of signs...will help to explain how human beings communicate with one another within a shared system, exchanging units that have common significance and a commonly understood set of rules of inference and implication.
>
> (Worth and Gross 1981:74)

That human beings have extensive communicative options is self-evident. Grimaud (1982) presents an overview of semiotics in Figure 1. These various sign systems represent the means of translating the inner intentionality or knowledge of one person to another, of bridging consciousness (whatever its source and mode) with that of another. Figure 1 illustrates the variety and complexity with which people share their experiences, their knowledge, their expectations, and their past, present, and future. It demonstrates too the possibilities that lie open for considering pedagogy as a semiotic process.

NOTE:

The figure to have been included here was entitled Figure 1 Grimaud's Semiotic Overview. It has been removed because of the unavailability of copyright permission.

The diagram showed two main branches of semiotics: zoosemiotics and anthroposemiotics. Zoosemiotics includes animal communication, nonverbal human communication, and general semiotics (the study of all forms of patterned interaction within or between living systems, e.g., genetic coding. Anthroposemiotics includes spoken language and its analytical modes (psycholinguistics, pragmatics, paralanguage, narratology, phonetics, syntax, and semantics), nonverbal anthroposemiotics (music, dance, graphics, sculpture), and speech surrogates (written language, aboriginal sign language, and the signing of persons who are deaf.

The chart originally appeared on page 208 in Michael Grimaud's article entitled "Frameworks for a Science of Texts: The Compleat Semiotician", published in Semiotica, 39-3/4 (1982), 193-241.

As Hervey (1982) points out, semiotics is not a single unified discipline but rather stems from two main traditions: American semiotics as formulated by Charles Sanders Peirce (1839-1914) and Charles Morris (1901-) who did much to interpret Peirce's work in a contextual frame, and French semiology as pioneered by Ferdinand de Saussure (1857-1913), L. Prieto (1839-1914), and Roland Barthes (1915-1980). Hervey credits Umberto Eco (1932-), a contemporary Italian semiotician, as having made the "only genuine synthesis" of semiotics (1982:3). As writer and editor in semiotics in North America, Thomas Sebeok at Indiana University has perhaps made the greatest American contribution.

The relevance of semiotics to education may be best extrapolated from several descriptions such as that of Bauman (1982) for whom semiotics is the study of the systematic nature of a group repertoire (e.g., the language and connotations commonly understood in the classroom), of a unified expressive system which examines the relationship of the forms within the system (e.g., the code of behavior within the classroom), their hierarchy (e.g., classroom emphases and priorities), and the degree of reproductivity of each. This unified system results in the formation of a special group of participants (as a group, class, or school). Pomorska writes (1982) of semiotics' collective creation, communal censorship, and long-term persistence (e.g., the traditions and contingencies of education). Hashimoto (1982) regards semiotics in more psychological dimensions, as the act or art of filling a void which depends on nothing more than will. This concurs with Gillan's (1981) eloquent description of human beings' ontological need--the desire to speak and to be spoken to. Feldstein (1979) sees the need for and ability to use symbols as inherent in our "dance of being".

Excerpts From Peirce's Theory of Signs

> Every word is a symbol.
> Every sentence is a symbol.
> Every book is a symbol...
> The value of the symbol is that it serves to make thought rational and enables us to predict the future.
>
> (Peirce cited in Bunn 1980:112)

Peirce's theory of sign is fundamental to any understanding of semiotics. He maintains that all sign-actions are triadic in nature, composed of a sign (representamen) which stands for something, its object, which in turn creates in the mind of a person an equivalent sign or a more developed sign referred to as an interpretant. A sign is regarded as a mediator, a specially created link indicating a relationship and presupposing something perceptual or experiential (Hervey 1982:29,38). Langer (1982:57) states that a sign indicates the existence (past, present, or future) of a thing, event, or condition in a one-to-one correlation, a pairing between the sign and its object.

This correlation has been described by Peirce in three ways, as shown in Table 1.

SIGN FUNCTIONS

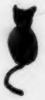
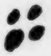
Icon	Index	Symbol
A sign which is representative by virtue of its similarity to the object signified	a sign in a distinct relationship to its object	A genuine sign representing something which is arbitrarily assigned and agreed upon
e.g. images, drawings, metaphors	e.g. letters on a diagram, "Oh!" thermometer "Meow!"	e.g. cat "cat" CAT kat/cak*
		*limited tolerance for deviation

Table 1 Sign Functions and Examples

icon --the sign in close relationship to the object it refers to because of some similarity to that object. Its signification may therefore be considered to be circular: beginning with the icon, referring to the object, and returning to the icon in a perpetual re-signification. e.g., Russian icons, portraits, drawings, metaphors.

index --the sign in some real relationship to its object, which points to or refers to the object. The signification is therefore unidirectional and does not necessarily return to the sign but to the object referred to, e.g., traffic signs, postal codes, music notation.

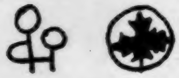
symbol --a genuine sign, an abstraction which does not exhibit any characteristics of its object and can only be meaningful by determining the interpretant which gives rise to a mental habit of association.

Table 1 illustrates the fundamental relationship of signs and their objects or referents, but it should be noted that there is considerable continuing controversy as to where the shifting lines of these classifications fall. To accommodate all possible variants of sign functions, Peirce formulated some sixty-six major distinctions with 60,000 permutations.

Most important to this study is his description of the sign in its operational force, as an interpretant in social activity (John-Steiner and Tatter 1983:84). The interpretant can function in three ways: as an effect, as motivation for action, and as symbolic meaning. Table 2 illustrates these roles. According to Maquet (1982:2), the importance of the interpretant is frequently ignored by social scientists. He stresses that the interpretant is the whole semiotic context necessary in order that a particular relation to its object make sense, and that the interpretant is an irreducible element in Peirce's triadic model.

This classification of interpretant effects has been extremely useful in developing the concept of discernible moments, moments of particular meaningfulness that allow, through the reading of their semiotic cues, access to interpretation (in this study) of the pedagogical relationship between teacher and children.

INTERPRETANT

Emotional Interpretant	Energetic Interpretant	Logical Interpretant
First significant effect of a sign	A single act produced by a sign	The meaning of genuine sign
e.g. a feeling of recognition or understanding 7:45 a.m. 	e.g. responding to a baby's cry, microwave beep, lights left on in the car	e.g. 7 % & "happy" "RRSP" U. of A. H_2O

Research Implications of Each Interpretant

May be important but undetected	Action may provide "clue" to catch meaning	May be "at risk" since researcher may assume knowledge but may not be correct and may not seek verification

Table 2 Interpretant Examples and Research Implications

Williams (1983:359) points out that Uexkull (1979) has reemphasized the importance of action in the creation of meaning. It is the activity of the individual that produces signs and invites interaction and interpretation which triggers signification. This signification in turn creates action in others that flows-back to the initiator. Stressing the totality of the individual in meaning-creation, Uexkull states that action is primarily in terms of nonverbal sign systems and that meaning is formed as a derivative of what happens when nonverbal sign systems are employed in action. (A fuller description of Uexkull's work follows.)

One further reference to Peirce is appropriate. He outlines a hierarchy of signs which he terms "firstness", "secondness", and "thirdness". Briefly, and based on Frederick's interpretation (1982:147), the characteristics of each are as follows:

> Firstness --the mode of being of that which is without reference to anything else.

Frederick utilizes Beardsley's term (1961) and describes "firstness" as pure potentiality, prominent in ideas of freshness, life, spontaneity, and freedom (1982:147). It is possible to use the concept of "firstness" to describe an originating experience, such as the spontaneous interaction between teacher and child within a pedagogical intention.

> Secondness --the mode of being dependent upon the intrinsic interaction of another single other.

Frederick describes it also as reaction-with and here-and-now actuality. "Secondness" may be used to describe the relationship of the teacher and a child: the teacher is only a teacher because a child is in need of an education; the child is a pupil only when in a relationship with a teacher.

> Thirdness --the mode of being which brings a second and a third into relation with one another, to mediate a particular and otherwise nonexistent relationship between them.

Frederick adds the idea of composition, mediation, laws, habit and thought (ibid.). "Thirdness" describes the relationship of the child as a member of a grade or class, e.g., a grade six student because of his presence in the grade six class and his working in the grade six curriculum. A child in a grade higher or lower does not enter into the grade-sixness of the situation.

Later I have related this concept of hierarchy to the pedagogical process and to the formation of what I have termed "experiential texts".

Ultimately, we are reminded by Hormann (1972 cited in Nadin 1983:377) that in communication, meanings are transmitted not from one person to another, but through one sign to another from the minds of the same persons. My interest in signs (as a researcher in education rather than as a linguist) is not so much in their conceptual structure as in their contextual power, in how people communicate.

> Treating as signs, objects and action which have meaning within culture, semiotics attempts to identify rules and conventions which...make possible the meanings which the phenomenon have. Information about meaning is crucial.
>
> (Culler 1981:31 cited in Hobart 1982:51)

If we are to understand meaning created, we must look at signs as they are expressed in other forms as well. For this reason, significant symbolic phenomena such as nonverbal communication, the use of symbols and artifacts, and ritual (whether routine, formalized, or ceremonial) are also considered relevant to the study of the semiotics of the classroom. Kapherer (1981), for example, surveyed the symbolic order of a private school during the whole school year. She notes a distinct relationship between administrative philosophy and school activities in general and in ceremonies and special events in particular. Her study emphasizes the integral relationship of nonverbal behaviors, symbols and symbolic meaning, and the use of ritual in the activities of a typical classroom. Along with verbal symbolization, these are invariably present in any given event.

Because semiosis is so critical in intellectual growth and in individual well-being, it is particularly relevant to explore how this occurs in one of our most fundamental social agencies--the school.

Pedagogy as a Semiotic Process

> Metaphorically, daily life may be said to comprise the navigation of sociocultural mazeways--those meaningful organized totalities of learned cognitive presentations of people, things, processes, and values held at a given time by a group. A culture then might be seen as a set of maze-way-equivalance structures.
>
> (Casagrande 1966:270 cited in Preziosi 1982:413)

Preziosi maintains that the built-world in which these mazeways occur is an instrument for the registration of cohesion and that, along with speech, our built-world creates life's experiences and meaning. One can readily apply this analogy to education where, in addition to the permeation of socio-cultural mazeways in the school curricula per se, the teacher creates specialized pedagogical mazeways which the children are expected to navigate successfully. Their sextant is the language that creates a semiotic milieu for learning.

Buyssen's discussion of the scope of semiotics may be extrapolated to provide descriptors of the teaching-learning process:

> conventionality--implying a degree of
> social accord,
> intention to communication, and
>
> membership in a set
>
> (Hervey 1982:157)

The semiotic scope of teaching is reflected in a particular repertoire, act, or system of communication (ibid.:58) that forms an inherent part of the pedagogical interaction between teacher and children. As Van Zyl states, socio-semiotics offers a means of discerning verbal and nonverbal exchanges or significiation--first as a model and then as a specific source of insights and terminology as a way of examining "bundles of relations" (Van Zyl 1982:131, 136).

Pelc (1971) suggests that the interpretation of metaphors might be achieved by way of what he terms "the semiotic quadrangle". It is useful in the interpretation of meaning from a semiotic perspective to use this notion as a way of discerning the interactive context in which that meaning evolves.

The components of the semiotic quadrangle are:

--the author of the sign
    --the sign
        --the designatum of the sign
            --the interpretant of the sign

When this semiotic quadrangle is extrapolated to apply to the pedagogical interaction that occurs within a classroom, these relationships might be represented as in Figure 2.

The diagram cannot show the semiotic relationship between teacher and children in its natural characteristics as sequential, simultaneous, multi-dimensional, verbal or nonverbal, or as permeated with silence or activity. Graphic representations of dialogue and interaction as well as descriptions and transcripts are necessarily bounded and two-dimensional. However, they do help us appreciate the movement of dialogue in the dynamic and impromptu communicative "jazz-session" that is characteristic of an elementary classroom (indeed of all human interaction that moves freely and purposefully). This diagram, as others used throughout this study, is itself a sign standing for and pointing to something else and in that process setting other thoughts in mind, a translation of life into a translation of language. This articulation process is our only means of capturing for others the reality we are coming to understand.

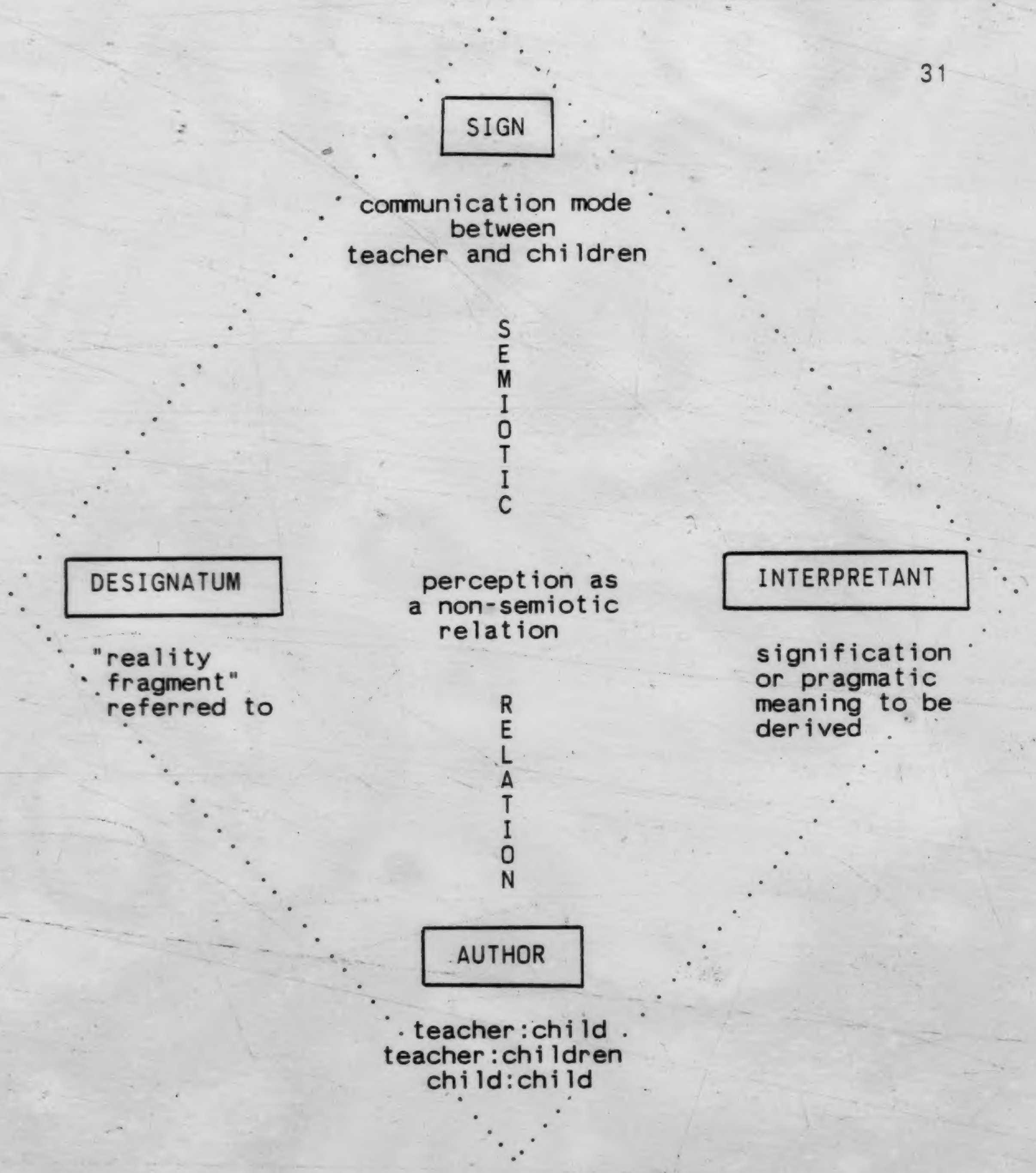

SIGN
communication mode
between
teacher and children
SEMIOTIC
DESIGNATUM
"reality
fragment"
referred to
perception as
a non-semiotic
relation
INTERPRETANT
signification
or pragmatic
meaning to be
derived
RELATION
AUTHOR
teacher:child
teacher:children
child:child

Figure 2 Pelc's Semiotic Quadrangle Adapted to Pedagogical Exchanges

(Pelc 1971:86 Schemata presented here is extrapolated from Pelc's text)

Using Peirce's hierarchical category of signs, it is possible to show another semiotic dimension of pedagogy. Table 3 indicates "firstness" as the direct interaction between teacher and children, child and child, or child and learning resource. It is the originating experience, the very moment of meaning-creation. "Firstness" is a pedagogical experience that comes into being because of varied and multiple sign systems.

Table 3 Pedagogical Experience as a Semiotic Process Using Multiple Sign Systems

FIRSTNESS	SECONDNESS	THIRDNESS
Meaning-creation through semiosis: instruction interaction dialogue action	Activities related to firstness: discussion questioning researching	Activities related to firstness and secondness: sharing presenting synthesizing evaluating
Experience is present to past	present to past	present to past and future as a total semiotic experience

In any lesson, a teacher may use the blackboard, an overhead projector, a graph, chart or diagram; may hold artifacts to be observed; may mime or gesture, frown, nod or turn away. She may speak, read, play a record, draw a map, show a film, or have children demonstrate their knowledge of a given concept. She will use language in different styles and emphases to convey meaning. Each mode of communication carries its own distinctive sign system, one that is already known by the children or one that is explicitly or implicitly taught to them. This pedagogical interchange is commonly referred to as "the lesson" and may introduce, expand, or refine knowledge presumed to be relevant. In this dialectical dialogue between teacher and child, each continually attempts to mesh his or her own sign system with evidence of understanding in the other's response. The experience cannot be re-experienced; it belongs to the past from in the moment of its creation. Consequently, in its uniqueness, it is "firstness".

Whether the pedagogical experience continues as an individual or group process, it now assumes a "secondness" wherein the knowledge is developed, expanded, or reinforced by activities directly related to the initial semiotic interchange. Often the teacher will make the shift deliberately, turning the children's attention to applying knowledge in a variety of ways, for a variety of purposes, and in a variety of formats. Some of these will be familiar semiotic paths. Others will be new and require further learning. This phase represents "reaction with" the referent experience, or "secondness".

Traditionally, the pedagogical experience makes a bid for the future. The children's involvement is turned into a synthesis of knowledge. Formal or informal procedures, each with appropriate sign systems, will be instigated to confirm for the teacher, for the children, and perhaps to significant others that learning has taken place. Sign systems will be prepared and placed before others as evidence. These may take many forms: math quizzes, spelling tests, creative stories, oral reading, dramatizations, wall displays, class newspaper, formal tests, and so on. Further, there is an affective and social interchange between the teacher and the class, and between the children themselves in this process. This is as much a part of the semiotic experience of pedagogy as what might be considered the more academic aspects.

My intent here has been to hint at the intricacy of semiotic exchange inherent in the pedagogical experience. I would argue that, while teachers and children are not unaware that they use sign systems in their daily activities, they do not often fully appreciate the underlying interrelationships nor the profound impact that sign systems do carry.

Thure N. Uexkull's New Semiotic Paradigm

Of particular interest, because of its potential relevance to education, is Baer's translation of Uexkull's Medical Semiotics: A New Paradigm (1981). Baer believes that Uexkull's work is not only the most wholistic model of medicine but (and because of it) is the best synthesis of a general theory of signs to date (ibid.:189). With a formulation of the symbiotic relationship of "the functional circle" (originated by Jacob V. Uexkull, his father) and the "situational circle", Uexkull synthesizes the age-old dichotomy of matter and mind in the formulation of meaning. Basing his construct on the primacy of language and "the principle of meaning", he describes an individual as being in a "functional circle" when stimulated by biological needs and a concentration on "self". An interactive movement is made into a "situational circle" when the individual becomes involved in a social context, when an awareness of others is sensed, and when the "self" relates to these others and is acknowledged and accommodated by them in turn.

This extension beyond the self is achieved by a symbiotic development of speech which allows for a transformative "jump of meaning" through the mediation of language-games to the second subjective envelope of "subject" and "individual reality".

Uexkull maintains that "the principle of meaning" is removed from a logical stance of causality on the basis that feelings, sensations, and thought (as "phenomena of inner perception") are not subject to causality (ibid.:168). The principle of meaning is based instead on meaning-relations, (as first proposed by Peirce who emphasized meaning as a triadic-relation consisting of signs that, by way of interpretation, stand for other signs). The fundamental premise is that:

> meanings are translations of signs,
> in conformity to a code...in which
> sign systems function as sign vehicles
> for other sign systems
>
> (ibid.:emphasis added)

Uexkull proposes "the formula of meaning" (ibid.:169), as having three distinctive features: "otherness", "incompleteness", and "infinity". According to Baer, Uexkull's paradigm does move toward answering Saussure's challenge to find unity in speech (langue) especially when acknowledging its physical, physiological, and psychological dimensions. Saussure's model presents meaning as a series of translations which by way of coding "jump" from one universe of discourse to another "...from concepts to sound-images and the translation of sound-images to brain impulses" (ibid.:170). This suggested an analogy that Uexkull uses so successfully. Uexkull calls the process a Bedeutungsprung:

> ...a jump of meaning from one sign system to another. The jump results in a Bedeutungskoppelung, a coupling of heterogeneous sign systems by way of a code. Meanings, not mechanics, link the incongruous universes of signs. Sign systems act on each other by the power of signification, not by "the weak rule of causality". For the new paradigm, therefore, the study of meaning precedes observation, because meaning is primary. It will decide what we see.
>
> (ibid.:170)

Further, Uexkull's paradigm (in agreement with Saussure and Wittgenstein) emphasizes the dialogic nature of speech, and since the world is linguistically-mediated that meaning is language-immanent. Wittgenstein states that language is "something unpredictable...not based on grounds...not reasonable (or unreasonable)...It is there...like our life." (1919,#559, cited in Baer ibid.:172). Uexkull's model presents "the circularity of meaning as a life-process" (ibid.).

The functional circle, limited entirely to the organism's own subjective experience and wholly subjective (ibid.:176), is linked through perception and enactment (action) to the situational circle where problem-triggering circumstances motivate problem-solving reactions. This linkage is made possible through the meaning systems provided by the natural language of a given culture (ibid.:177). As Baer indicates, they form Jacob von Uexkull's favorite metaphor--a symphony.

> The two circles or envelopes, although acquired ontologically in diachronic sequence, are in mutual synchrony from very early on.
>
> (ibid.:178)

The symbiotic circle is crucial for the emergence of this symphony of meaning, and Uexkull relates it to Peirce's terminology: symbiosis, as a _first_, foreshadows semiosis as _third_. In between, we find "the other" as _second_. The archetypal symbiotic circle is that of mother-and-child. In Uexkull's terms, it is in this symbiotic circle that the infant experiences "islands of self" gradually differentiated from "islands of objects". It is through ongoing reciprocal translations of messages that the univocal functional circle, by the insertion of a secondary sign system, transforms into a polysemous situational circle. The movement from symbiosis to semiosis is predicated on the existence of a significant other (ibid.:181-185).

> Reality shifts precisely between the two poles of indexicality and symbolism of things, weaving in between the magic fabric of icons that reflect--due to the circularity of meaning--at once self and world, both embedded in each other and hence "pointing" to or signifying each other in a circle that Uexkull schematically represents as having the double dimensions of the "functional" and "situational" circle.
>
> (ibid.:185)

This coupling of the infant's symbiotic meaning system with the "other" communicative meaning systems is founded on the principle of meaning as an ordering principle that lets everything appear within the perceptual loop of subject and Umwelt, the individual as self and as part of the world.

The implications of Uexkull's New Paradigm for educational research have yet to be explored. But the role of teachers as culture's transmitters, as surrogate parents, and more importantly as "significant others" in the lives of children, suggests that the symbiotic circle which enfolds them _is_ the continuation of the functional and situational circle that began with mother-and-child. Together teacher and children create meaning through the circularity of meaning. Their interrelationship and communicative interpenetration appear to meet Uexkull's pragmatic criterion of reality (ibid.:186). What more pragmatic reality is there than what exists in the pedagogical relationship between teacher and child?

It is here, in the actuality of reality, that my interest in semiotic is focused. Uexkull's paradigm directs my observations to the interrelationships that create meaning in the pedagogical process, to the "jump of meaning" between teacher and children.

But it is characteristic of a "jump" that the landing may not be precise. To jump is to leave the place where one has been, to distance oneself from the given. It implies that one is suspended briefly in space and, in an indeterminate pause, is held in an unknowable space. This is what Uexkull may mean in describing the jump of meaning as "the liberation of phantasy" (ibid.:177). In that leap, one is freed from the past but is not yet safely in the future. The transformation, from where one has been to where one will be, is swift and irreversible. The jump concludes itself. It lands. Where it lands is where and what meaning can be given to it.

Uexkull's principle of meaning becomes an appropriate description of how people create meaning for themselves and for others: a jump through and with semiotics, from one sign system in one person's mind to another's. Meaning jumps and lands, but without the precision of radar-controlled landings. The coupling of these heterogeneous sign systems may not be perfect, cannot be expected to be perfect. But, as human beings, what else do we have but that capacity to jump into meaning as best we can?

As a researcher, I jump into an exploration of the semiotics of the classroom, fervently hoping that when I land I will not be too far from understanding how teacher and children live in the principle-of-meaning, both as individuals and as symbiotic partners in the creation of pedagogy.

Meaning and Symbolization

> It is not as if we have experiences and then try to understand them. Our experience is our understanding.
>
> (Silverman 1975:32, cited in McHoul 1982:43)

The question of meaning winds back to our earliest history and is intricately bound to symbolization. How is it that we can know? What does it mean "to know"? What is meaning? How do our experiences become transformed into meaning? Despite the efforts of philosophers, theologians, and linguists (among others), there is no universal answer to these questions. The inescapable circularity of the arguments is reflected in the shifting nature of the meaning of "meaning" itself, in the necessity of anchoring ourselves in distinctive historical and social circumstances which limit our total understanding, and in the intertwining of nature and culture that precludes any acceptance of universal meaning.

Hobart cites Hollis (1970) as redirecting the explication of meaning to the stream of life where meaning is not held to be constant. Hollis urges us to put aside metaphysical assumptions and

> Keep as much as possible of the subtlety, and lack of clarity even, of cultural discourse as it is spoken: might it be that we try falsely to generalize issues beyond the

> enterprise in which they are postulated?...
> It might well be preferable to sacrifice
> universal notions of rationality, meaning, or
> whatever instead.
>
> (Hobart 1982:57)

If meaning cannot be construed as universal, then we must turn to meaning as it is created by those who live uniquely within its creation. Meaning is created and conveyed by semiotics, by the various sign-systems that have evolved throughout our history. These sign systems allow us to understand and to expand our world in two ways: through the conceptualization of ideas and as a medium through which our knowledge, understanding, and beliefs can be shared with others.

Langer (1982,1942) proclaims the power of symbolization as the most decisive tool, the starting point of all genuinely intellectual growth that frees us from its dependency on external reality (ibid.:22-29).

> The formulation of experience which is contained within the intellective horizon of an age and a society is determined, I believe, not so much by events and desires, as by the basic concepts at people's disposal for analyzing and describing their adventures to their own understanding.
>
> (ibid.:6)

> Symbolization is the process by which things and attitudes become objectified in our minds as having distinctive qualities, and then once so constituted, as in turn having effect on our thoughts and emotions.
>
> (Parkin 1982:xxxv)

Langer claims that this symbol-using or symbol-reading is the keynote of all humanistic problems, for it enables us to transform the material furnished by our senses into symbols which are our elementary ideas, the starting point of all intellection (Langer ibid.:25,42). Symbols, by their representational power, allow us to transmit and transform experiential data into overt action as the expression of ideas. Nadin (1983) argues this point strongly: that the distance between the sign and the meaning of the idea is itself a parameter of the evolution from nature to culture and, within the framework of culture, from one stage to another (ibid.: 382-383). While it is widely recognized that speech is but one of the symbol systems available to us to express our ideas (others being ritual, non-discursive action, art, music, dance, etc.),

> Speech is...the readiest active termination of that basic process in the human brain which may be called symbolic transformation of experience....Words are certainly our most important instruments of expression, our most characteristic, universal, and enviable tool in the conduct of life. Speech is the mark of humanity.
>
> (Langer ibid.:44-45)

Since our schools are the primary agency responsible for orienting children to symbolic sign systems, it is appropriate that attention be paid to the interplay between children's need to create meaning and the means by which such meaning is expressed. This study looks at the power of symbolization--the power of semiotics--in creating pedagogical meaning that carries intent, content, and value. While this study is limited in the main to a single elementary classroom, this small world tells us something that is often obscured in the larger one: how semiotics, as an abstract entity, can be used by individuals to structure their conceptualization of their world and how, by examining the workings of these multiple sign systems, we can come to a better understanding of the context of life there created and shared.

As Sperber maintains, it is not a question of interpreting symbolic phenomena by means of a context but, quite the contrary, of interpreting a context by means of its symbolic phenomena (Sperber 1975:70). Consequently, the context of the classroom in this study will be determined by the meaning of the symbolic phenomena initiated by the teacher and the children. Fundamentally...how does a classroom mean? How do children and teachers live as semiotic beings? How do they create meaning through semiosis?

A Rich Ambiguity of Meaning

Meaning is elusive. Hobart (1982) describes it as a slippery word, a weak notion, far from clear, and far from culturally neutral. Barrett agrees:

> There is no ultimate reality lying behind or beneath ordinary experience to which we turn intellectually as the court of last appeal. All meanings are born within the human world of the everyday, and have to return there to be tested. A split between inner and outer, private and public worlds becomes equally unfeasible....No metaphysical curtain is drawn to divide our language into mutually exclusive private or public universes of discourse.
>
> (Barrett 1979:74)

Hobart cites the interpretation of meaning as exemplified in the intellectual tradition of the West as the Anglo-Saxon analytic, the German hermeneutic, and the French semiological (1982:39-40). Its definition is further compounded by its multi-faceted subtleties.

> To "mean" is, in its simple lexical definition, to have in mind, to have an opinion, to intend, and derives ultimately from the Indo-Eurpean base maino, from which are derived, O.E. maenan, and German meinen, all of which signify "to have an opinion". Broadly speaking, a "meaning" is what is intended to be, or in fact is signified, indicated, referred to, or understood.
>
> (Turner 1979:88)

"Meaning" can also imply causality, motivation, verification, or infinite linguistic variations between words, sentences, and whole texts (Hobart ibid.:40-43).

> The epistemology is meaning itself, consisting of its two main parts: meaning as causality, and meaning as signification.
>
> (Parkin 1982:xvi)

Ricoeur (1978), following Vygotsky, defines sense as the immanent design of the discourse as understood by cultural rules. These he identifies as semantic and syntactical rules, reflecting Black's term--a system of associated commonplaces, or Beardsley's--potential range of connotations (ibid.:140). Taylor agrees that meaning is rooted in social practice for it is a collective act, a consciousness which is community-sustained (Taylor 1982:75,78). Further, he maintains that intersubjective meanings are constitutive of the social matrix in which individuals find themselves and act (ibid.: 74).

Within the classroom, children are immersed in a particular culture's meaning by persistent and relatively consistent teacher emphasis. The sense that children are able to make of the situation comes at the nexus of their preunderstandings, their contextual awareness, and their intentions and expectations. Meaning does not so much confront them as it envelops them. As Ricoeur states, "the decisive moment of explication is that of the construction of the network of interaction which makes of this context an actual and unique context. (Ricoeur ibid.:142).

Challenges in Determining Meaning

> Meaning is not something that can be added to the system after it has been analyzed, rather it is the first and most fundamental topic.
>
> (Riegel 1976:69)

Hudson (1972) describes the inevitability of dilemma in attempting to determine meaning with any precision:

> Problems of meaning abound whenever one person attempts to understand another he does not know intimately. And when he does know him intimately, they still abound. For their relationship will generate a context of social rituals, jokes, and tacit assumptions that enable them to negotiate the dangerous patches their relationship contains.
>
> Consequently, any agreement they reach may reflect no more than the existence of a common mini-culture between them....Problems arise whenever two people attempt to communicate about aspects of their lives which are other than banal.
>
> (Hudson 1972:150)

For the researcher, this emphasizes the point made by La Barre (1980:27) that differences in meaning lie not so much in differing, real objectives of the outside world as in the basically different subjective ways of apperceiving. Inevitably, there will always remain a residue of doubt, a "zone of uncertainty" (Laughlin and Stephens 1980) in human encounters. As Kendall (1982:208) says, there will always be blindspots and gaps in our knowledge because we cannot know all the forces conspiring to influence our thinking.

Nor can research presume to reveal the full dimensionality of meaning or even convey completely to others any meaning honestly derived. The semiotic web catches us at the origin of the meaning and at its dispersement. The multiple approaches used in this study are intended to assist in coming as close as possible to the pedagogical meaning in the classroom, but there are no illusions of the purity or completeness of the final captured meaning.

Rather, as La Barre suggests, fear of data is the beginning of wisdom (1980:291). It might be added that fear can be a constructive force, giving rise to a respect for data and its sources. However, the problems of defining, creating, and analyzing meaning should not defeat one. Kendall finds purpose in this struggle:

> Such intellectual lacunae should not promote despair and frustration as much as they should promote celebration. The gaps in our knowledge guarantee that our search for self-understanding will continue. They guarantee that this very interesting game we are playing will go on.
>
> (Kendall ibid.:213)

Hobart accepts this challenge:

> The better the argument, often the more it provokes debate and eventually its own refinement or rejection.
>
> (Hobart 1982:58)

He urges researchers to accept the possibility of reflecting on their own categories and their self-evident assumptions and on what to select from the richness of human action and discourse. Gadamer (1977:531) states that progress in science must be sustained by "continual self-correction". There is then no definitive evasion of the dilemma of determining meaning, only the constant rejoinder that its very elusiveness must alert researchers to diligence.

Parkin poses questions about discerning meaning that can only be answered by those directly involved:

> 1. If our own semantic webs shape the way we explain others, then how do we translate?
> 2. How far do we now view "meaning", not as given to us by a system of signs, but as placed by ourselves on and through objects and acts we see and experience?
>
> (Parkin 1982:3)

The answer too is elusive, and therein lies the challenge.

Pedagogical Meaning

> The meaning of an event is the sense of its forthcoming interpretation.
>
> (Ricoeur 1978:281)

Children go to school. By law, tradition, and their own expectations, they spend twelve or more critically formative years in the classroom. It is generally assumed that what occurs between the teacher and the children is important. But what _is_ it that creates this learning? What is it that gives pedagogical meaning to their interactions? As Figure 3 shows, pedagogical meaning may be created in a context which includes all children yet it must be discerned by each child individually. By asking the teacher and the children about their daily activities and by observing them as they live in the classroom, it is possible to bring the subtleties of the creation of pedagogical meaning through semiotics more sharply into our awareness.

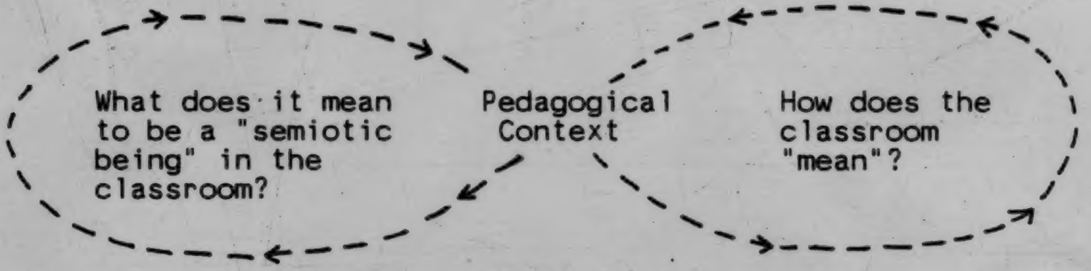

What does it mean to be a "semiotic being" in the classroom?
Pedagogical Context
How does the classroom "mean"?

Figure 3 The Semiotic Search for Pedagogical Meaning as a Semiotic Process

The main focus of this study is on using a semiotic research approach to discover the semiotics of pedagogy, a process whereby teacher and children use and share a variety of verbal, nonverbal, visual, and spatial sign systems to create meaning. Semiotics and pedagogical meaning are considered to be interdependent.

The phrasing of the main question as: "How does the classroom mean?" is intended to emphasize how communicative interaction is handled rather than what these patterns are. As Langer writes, the intent is

> Not to describe the motion and matter of a thing, but to see its purpose...to understand it.
>
> (Langer 1982,1942:9)

This shift in emphasis gives rise to new questions: Not "What is meaning in a classroom?" but "What is the power of that meaning? Not "What is meaning as an abstraction?" but rather "How is meaning created by the teacher and the children in the ongoing momentum of their lives?" Not so much "How do they acquire experience?" as "How do they use experience in the realm of conceptualization and expression?"

Descriptors of the dialectical teaching-learning relationship have shifted through time and are ever-renewed. It is the giving and getting of knowledge. It is creating and expanding knowledge. It is, perhaps more accurately, the process of living in the context of knowledge, in the expectation of knowledge, and of becoming changed by that knowledge and that expectation, whether it be fulfilled or frustrated. Ideally, teaching-and-learning is a constructive, rewarding, and exhilarating experience. Realistically, it is a life process marked by human frailties. Ultimately, however, it is a meaning-relationship of worlds of sense created by the teacher and the children. It is a world of meaning created by, and uniquely for, each other.

Murdoch describes the importance of the teacher-child relationship as imposing a lasting obligation upon the teacher:

> You must know from experience how lively and how durable such a connection can be, and it is not your "fault" any more than it is mine that we are in this way eternally connected.
>
> (Murdoch 1983:415)

Bleich states the important observation that

> People with a common purpose must create a new relationship in pursuit of their purpose. Each person participating in the relationship naturally brings his own needs and motives... personal motives for membership in the classroom have to be translated into motives for knowledge. That is, what each person wants has to be re-understood as what each person wants to know.
>
> (Bleich 1978:134)

Pedagogical meaning then may simply be that cognitive, affective, or social understanding that results when a child comes to know what he wants to know or didn't know he could know.

"Meaning" between adults and children and between teacher and class has marked similarities, such as the sharing of a interactive experience or alternating the role of knower-learner and learner-knower in what Riegel (1978) describes as an ever-evolving dialogue. However, meaning between teacher and children has the sanction of society and in return has an obligation to society. This teacher-child relationship represents "education".

Meaning in a pedagogical setting has distinctive characteristics because of that setting and the authority vested in the teachers to transmit cultural values, knowledge, and those qualities of attitude and behavior that mark good citizenship. By implication, pedagogical meaning is purposeful, specific, and accommodating to both individual needs and society's goals. It evolves in a presence created by the interaction of the teacher and children. It is encircled by the boundaries and vista of their language (spoken and unspoken), their intentions, their beliefs and values, and their expectations. Where and when these are in harmony, a oneness is created and from that unity--learning. Such unity moves teacher and children forward together, toward new learning and new choices. Where there is dissonance, meaning is obscured and learning merely stumbles.

From their complex intermingling of language, action, and intent, I have tried to uncover some of the links that create meaning for the children and for the teacher. In examining their pedagogical relationship, I have looked for cues in the creation of "discernible moments" (infra:85) that could bring us closer to the inherent meaning of pedagogical experiences. In my search through the semiotics of this meaning, I have not been alone. A grade four teacher, Mrs. Wayne, and her twenty-seven boys and girls have helped me make my way through the maze. They have shared their semiotics with me. As much as I could, I shared mine with them.

There were moments when we did share a rich connection of meaning and I have attempted to portray these meanings within this documentary text. There were also moments when we did not, could not, did not know how to share connections of meaning. Those meanings await someone more attuned to those particular semiotics. What I have been able to understand of the semiotics of pedagogy has given me an incredibly deeper appreciation for the power of sign and the force within human beings that drives us to create and share meaning in whatever way possible--through conventional language and gestures, through creative and unique modes of expression, or in stumbling, half-phrased, or shyly implied states of being.

Research Design as a Semiotic Framework

Researcher's Intentions

All sight passes into contemplation,
all contemplation into speculation,
all speculation into combination,
so that at every attentive glance
into the world, we are theorizing.

(Goethe, cited in Cassirer 1957:16)

My research design is premised on my total life-experience. That is not as facetious as it may seem. I grew up across the street from my uncle's theatre where my father was the projectionist. The images projected on the screen became a second and very real world for me. I _knew_ they were not real; I also knew they were. All of which brings me as close to Locke's _en reale_ and _en rationis_ as anyone can be.

Not surprisingly when I went to university, I majored in English literature for where is the exploration of symbolism more pronounced? Then Heather, our first daughter was born blind. I tried to learn Braille (a strange and incredible code) until it became evident that Heather would never understand Braille or more than the simplest things in life. Communicating with her through her particular linguistic limitation ("echolalia"--repetitive and limited speech) was and continues to be a fascinating, frustrating, and rewarding experience.

During 1971-1975 I was involved with other parents in the establishment of the first activity-centre in Edmonton for severely handicapped children. Deaf, cerebral palsied, blind, profoundly mentally retarded or multiple-handicapped children (frequently with almost unpronouncable medical designations), their greatest challenge is understanding others and having others understand them. We found the children under those labels, and that was another semiotic experience of particular poignancy. Eventually our work and that of many others led to the establishment of "Resources for the Dependent Handicapped" in the Province. That too was a semiotic triumph over long-standing indifference and neglect.

In 1977, I began teaching children who are gifted and I faced yet another semiotic extreme. Quick, articulate, inquirying, and eager, these children ran through ideas with imagination and courage. Whatever I knew of history, art, music, social and cultural development, scientific inquiry, technology, and world events, I had to consolidate and juxtapose in new and interesting ways. Whatever I knew about pedagogy was tested to the limit. Much earlier in my teaching career, I had been a long-term lecturer at the Faculty of Education. Then I had to explain and demonstrate effective pedagogical methods to young adults. Teaching the gifted forced me to examine the pedagogical process further. I found that there was much more I wanted and needed to know.

My research into the semiotics of the classroom stems from all these threads, but within them all is the basic human experience of wanting and needing to communicate with others. What _is_ it that creates a positive and exciting communicative experience for everyone involved? More specifically (and it is important to recognize these not as "asking" questions but as "watching" questions):

> How does a classroom mean?
>
> How do teachers and children understand each other?
>
> How does meaning grow as it moves from one to another?
>
> Why does it occasionally deflect away from all intentions and become something that neither one intended, something richer or poorer than the meaning begun?
>
> What is it that moves semiotically, and endlessly, between teacher and children conveying a thought, a feeling, a dream, or an intricate tangle of all of these and more?

If the classroom is a place where we believe children learn, what _is_ it in that classroom that allows, encourages, or compels them to learn? Or regrettably, what _is_ it that stands abruptly between them and forbids learning, tempting them away, or obscuring the path they would willingly have followed? What role does semiotics play in this?

No child raises his hand to ask these questions. Yet if answered by those intimately involved in education, the answers might enclose teacher and children in a new sensitivity one for the other. The answers might reveal to those of us who care what it is we mean by "the semiotics of learning". It is this intimate understanding of how we create meaning for each other that can lead to new insights into the teaching-and-learning experience. All this intrigues me still.

Research Design

> Richness of design differs from rightness of representation or description not so much in nature or standards as in the type of symbolization and mode of reference involved.
>
> (Goodman 1978:137)

My two main areas of interest are pedagogical interaction as the source of pedagogical meaning, and the semiotics that create that meaning. Clearly, these are inseparable.

Pedagogical Interaction refers to the pedagogical relationship created by and between teachers and children as evidenced by their dialectical dialogue and action.

"Captured Events" and "Discernible Moments" (infra:85) are used as exemplars of significant and meaningful events that have a pedagogical, sociological, or psychological impact on individuals and groups involved.

Semiotics is the overarching focus of this study that lends me thematics and terminology with which to explore the function and meaning of sign systems evident in the classroom. These sign systems are interpreted primarily on the basis of Peirce's Theory of Sign. That is, Firstness, Secondness, and Thirdness, and Icon, Index, and Symbol.

Symbolism is observed in forms, events, and formats that imply symbolic meaning, e.g., realia, nonverbal behaviors, the use of symbolic objects, the symbolic use of space, etc., as implicit "carriers of meaning".

Ritual is observed as practised in routine, formalized, and ceremonial contexts.

Nonverbal Communication is observed as it is created by gesture, movement, eye contact, facial expression, manipulation of objects, and the use of space.

Figure 4 illustrates the main features of these selected areas of interest. While graphically they appear as static entities, they are best understood as changing their interrelationships, much like the changing patterns of a kaleidoscope.

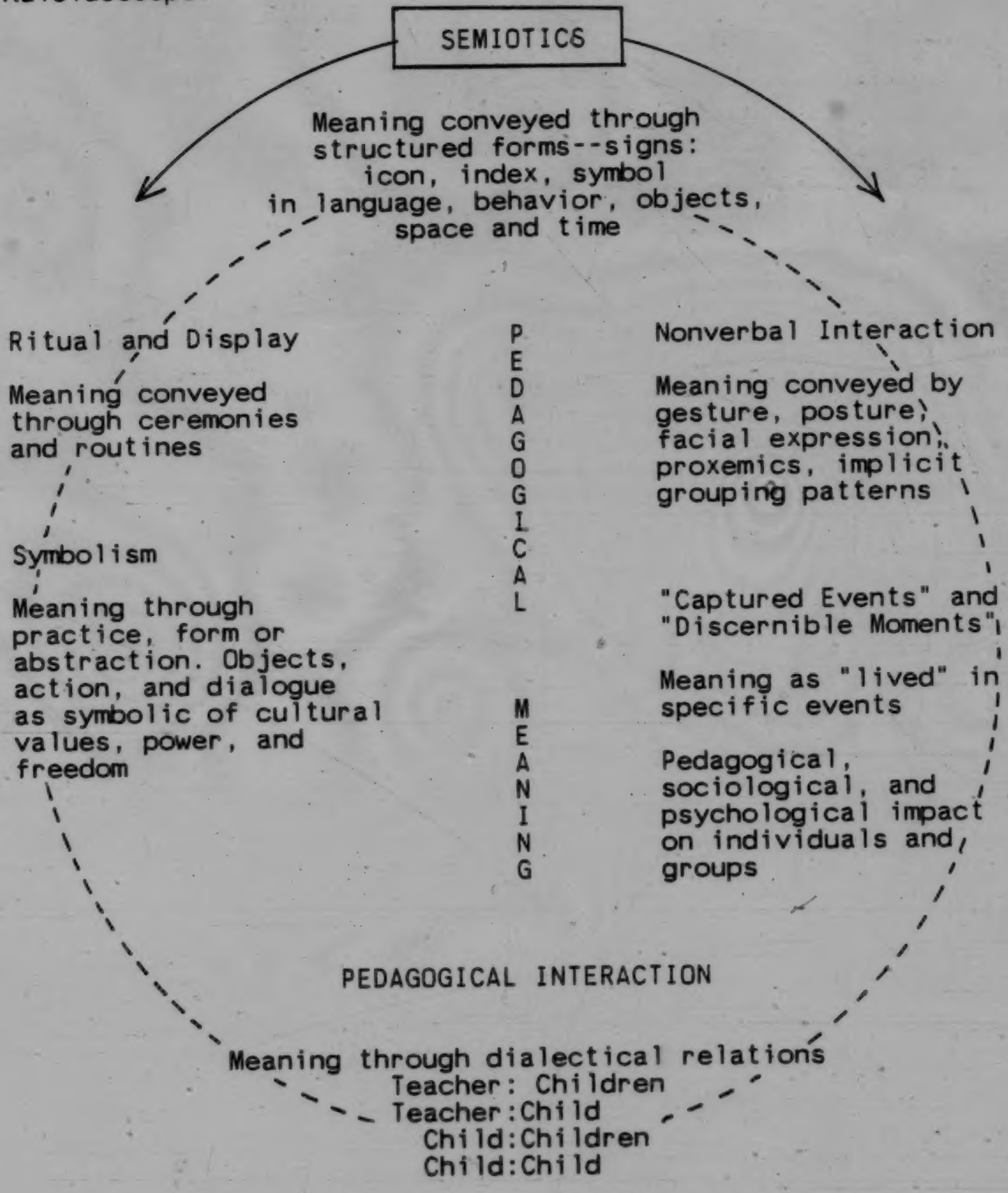

SEMIOTICS
Meaning conveyed through structured forms--signs: icon, index, symbol in language, behavior, objects, space and time
Ritual and Display
Meaning conveyed through ceremonies and routines
Symbolism
Meaning through practice, form or abstraction. Objects, action, and dialogue as symbolic of cultural values, power, and freedom
PEDAGOGICAL
MEANING
Nonverbal Interaction
Meaning conveyed by gesture, posture, facial expression, proxemics, implicit grouping patterns
"Captured Events" and "Discernible Moments"
Meaning as "lived" in specific events
Pedagogical, sociological, and psychological impact on individuals and groups
PEDAGOGICAL INTERACTION
Meaning through dialectical relations
Teacher: Children
Teacher:Child
Child:Children
Child:Child

Figure 4 Where the Search for the Semiotics of Pedagogical Meaning is Focused

My search for semiotics of pedagogical meaning was further governed by my interpretation of four main areas, subsumed under my prevailing interest in how children create meaning in an educational environment and how that meaning may be enriched by those responsible for their intellectual growth. These four areas are shown in Figure 5 and have been useful in recognizing, analyzing, and interpreting meaning created and sustained by dialogue and action and by nonverbal, spatial, relational, and pedagogical semiotics. These are not to be regarded as topics but rather as bases from which I viewed classroom events.

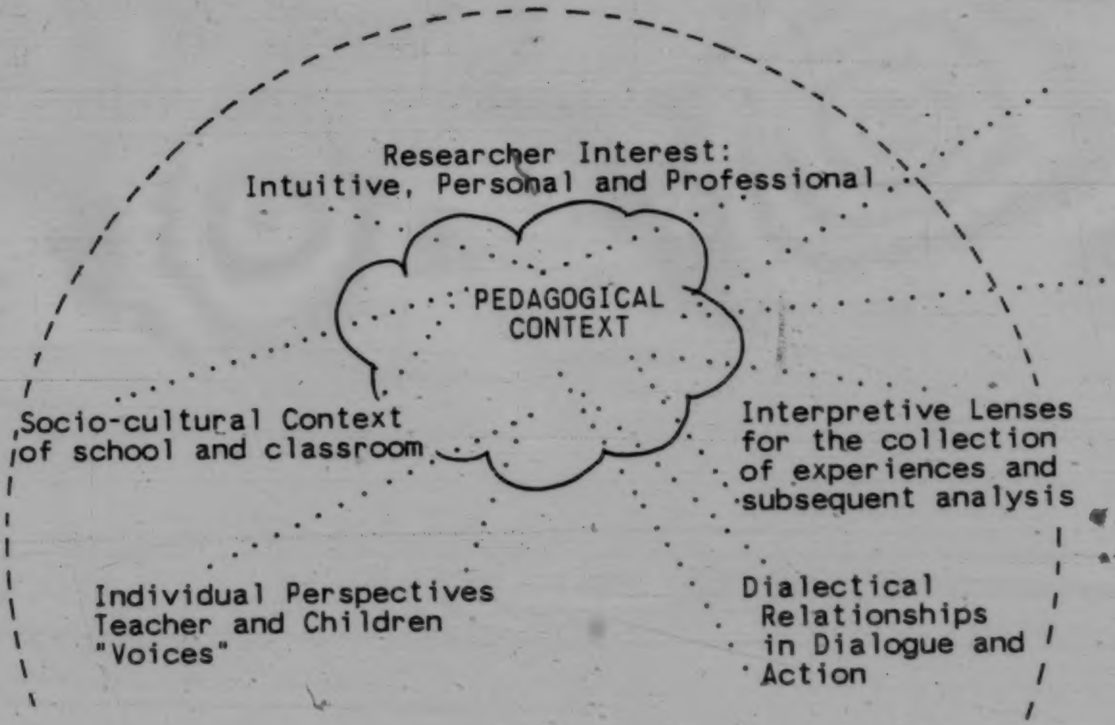

Researcher Interest:
Intuitive, Personal and Professional
PEDAGOGICAL CONTEXT
Socio-cultural Context of school and classroom
Interpretive Lenses for the collection of experiences and subsequent analysis
Individual Perspectives Teacher and Children "Voices"
Dialectical Relationships in Dialogue and Action

Figure 5 Perspectives from which Pedagogical Meaning is Interpreted

The Socio-cultural Context: a description of the classroom setting, the fundamental structure, ambience and context; the influences and activities that evolve within that setting; the rules, routines, rituals, and procedures that characterize its nature and, where discernible, those external influences and values that affect its identifiable qualities.

Individual Perspectives: as solicited from the teachers and individual children during classroom activities, informal conversations, interviews, and video-taped scene interpretations, i.e., What do children and teachers bring to and take from classroom dynamics in terms of pedagogical meaning as conveyed by various sign systems?

Interrelational Aspects: How does the dialectical dialogue and action between teacher and children and between the children create, sustain, modify, or alter meaning in the classroom? How do teacher and children "read" and respond to signs emanating from appearance, gesture, behavior, language, or attitude?

Interpretive Lenses: the use of various modes of recognizing and collecting impressions of experiences from teachers and children, e.g., observation, audio and video-taping, interviews, video-scene creation and interpretation.

It is important to recognize these interpretive lenses as semiotic, creating distinctive sign systems as carriers of meaning and lending a particular emphasis to the interpretation of this meaning--both product and process. They create a semiotic linkage between lived experience, our record of that experience, and our final understanding in semiotic terms of the meaning of that experience in the broader educational context. The significance of these interpretive lenses is fundamental to the research design.

Further, neither the main areas of interest nor the perspectives from which those areas are viewed have functioned to sharply delimit the scope of the study nor to foreclose any explorative or interpretive possibilities during field research or subsequent analysis. Rather, these descriptions are intended as a rationale for the context of my search, as a sampling of inquiry opportunities I thought to be relevant, and as illustrations of my approach to a research project of this nature.

Collection of Impressions of Experiences

Two main tributaries have contributed to my understanding of the semiotics of pedagogical meaning in elementary classrooms. The first was an exploratory study conducted during April and May of 1983 at a local elementary school.

The second was the major study I undertook in a grade four classroom from September, 1983 to May, 1984.

The Exploratory Study: A Synopsis

This exploratory study was undertaken with three main purposes in mind. First, to reawaken my observation skills and my sensitivity to the ongoing interaction between teacher and class at each grade level. Second, to explore the possibilities of using a 35mm camera, a video-recorder, and the taperecorder to document these interactions with particular emphasis on verbal and nonverbal communication between teacher and class. Third, to analyze and interpret the observation and documentation gathered during this experience from a semiotic perspective. Could I detect and understand the semiotics of pedagogical meaning as it was created between teacher and class? What preliminary themes could emerge from this interpretation?

I spent one and a half days in each grade: kindergarten through to grade six, and in an intermediate level special education class. During the first half-day visit, I took observation notes of classroom events and black-and- white photographs of teacher-children interaction. The following day, I returned with videotape recording equipment, and shot a one-hour tape in each classroom. I filmed arbitrarily for five minutes at half-hour intervals and longer where there appeared to be a particular richness of semiotics occurring.

> Each place, through its proper tempo, invites me to its own kind of going, walking, hurrying, as well as seeing and hearing [and filming.]
>
> (Vandenberg, 1972)

Portions of this photographic and video documentation were used as discussion-starters in interviews with each teacher and with four or five children from each grade level who volunteered to participate. In addition, open-ended interviews about life and meaning in the classroom were held with teachers and children. A final variation was added: two or three children at each grade level were invited to act out "being a teacher" in an empty classroom. Soon this space was transformed (in their minds and mine) with "real" imaginary children in need of a teacher's guidance, their guidance. Their actions and commentaries were videotaped.

In total fourteen hours of videotape, twelve hours of interviews, and eighteen hours of observation notes were collected as descriptors and interpreters (signs) of what occurs in an elementary classroom at different age levels. The preliminary analysis indicated a rich complexity of meaning portrayed in verbal and nonverbal interactions between teachers and children. The permanent nature of the photographs, audio-tapes, and videotapes has been invaluable in providing repeated access to the experiences observed in the classrooms. Nuances of meaning, readily lost in memory alone, were preserved in these formats and with re-viewing increasingly revealed new semiotic importance and refined my understanding and appreciation of the events and interrelationships. Further contextual settings, critical in discerning the simultaneity of events and effects that embody meaning, were renewable through these constructive and accessible media.

The richness of semiotic information from this exploratory study was remarkable. Indeed, there is still enough unanalyzed documentation to require a full-length concentration and interpretation of its own. The analysis I did do more than convinced me of the enormous potential for semiotic exploration in the meaning-creation of a classroom. Rather than delimiting my major study, this exploratory study only emphasized how much there is to be done in research in this area and how critical such research is in extending our understanding of what is occurring in classrooms everywhere.

The Major Study: A Semiotic Exploration of the Semiotics of an Elementary Classroom

During the summer of 1983, I was able to contact a teacher who agreed to participate in my research project for a relatively long period of time--eight months. Mrs. Wayne welcomed me into her classroom from the first day of the new school term, September, 1983. My involvement with her and her class ended in late May, 1984. The schedule of visitation varied from full-week, full-day observations to weeks of morning visits, afternoon visits, connecting day visits, or once-a-week visits. In total, 120 hours of classroom observation including 24 one-hour videotapes (filmed from mid-October to the end of January) form the bases of my analysis.

In addition, there were nine major interviews with Mrs. Wayne lasting from one hour to two-and-a-half hours, numerous informal conversations with her and the children, the equivalent of sixteen hours of interviews with eighteen different children (including two, three, and four interviews with some of the children at various times during that period), and in May, eight "teacher enactments" by the children. Some of the interviews were keyed to preselected video scenes to which the teacher and the children (independently) were asked to respond. The intent here was to have them clarify or elaborate their perceptions of how meaning evolves in the classroom. Open-ended questions sampled socio-cultural, individual, relational, and interpretive perspectives as well as the participants' understanding of semiotic interchange within the classroom.

If the collection of experiences during the exploratory study was formidable, that from my major study could provide the basis for a life-long investigation.

The Interactive Context

The People

Figure 6 shows the interactive context that formed the basis of my study. Central to the collection of my impressions of their pedagogical experiences were the teacher and the children and my own particular interests and skills. The teacher, Mrs. Wayne, and the children are not merely the source of pedagogical semiotics to be acknowledged and forgotten but the very sustance of meaning exemplified in this study. They are the "sense" of an elementary classroom. This meaning does not create itself nor does it exist by the imposition of external forces. Rather, it stems from people using semiotics in their dialectical relationships with one another. It is meaning created, interpreted, and shared with other human beings. As individuals and as a "context", they represent a totality of living that cannot be extricated from who they are, what they mean, and how a contextual meaning evolves from their very togetherness. As Preziosi states,

> The experience of the semiological enterprise ...has made it painfully clear that any attempt to understand traditionally delimited modalities of signification in isolation has been as futile as trying to trace with a pencil the shadow of the tracing pencil.
>
> (Preziosi 1982:419)

Figure 6 is merely a summation of the fullness of Mrs. Wayne's and the children's inherent belonging.

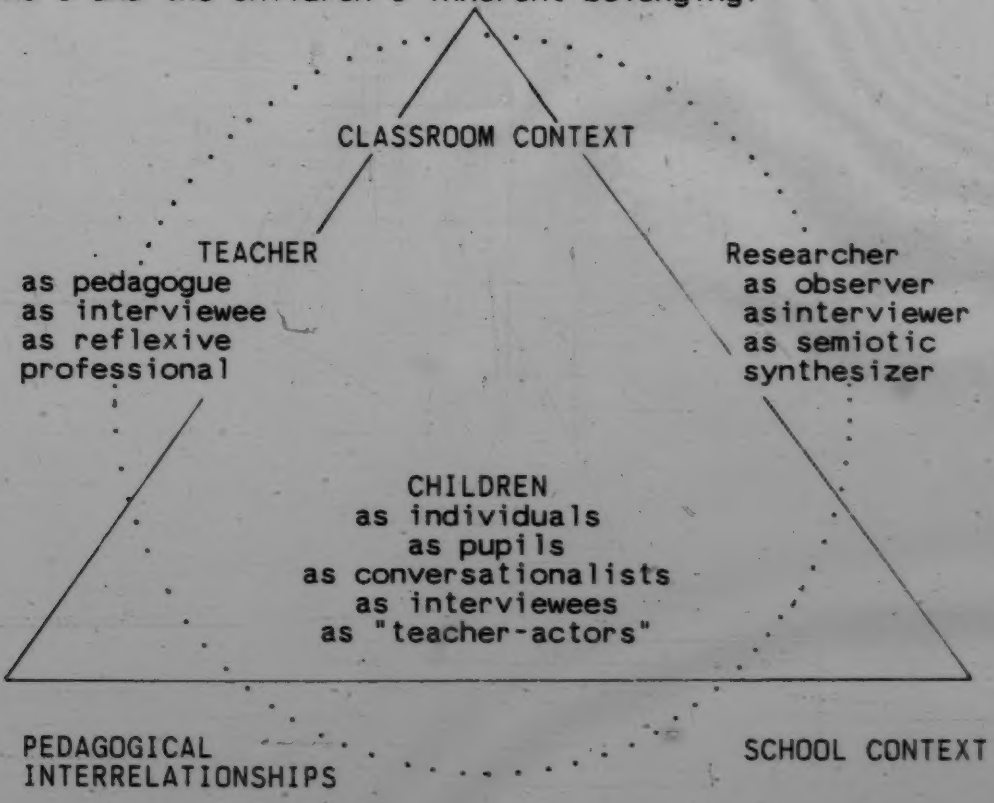

CLASSROOM CONTEXT
TEACHER
as pedagogue
as interviewee
as reflexive professional
Researcher
as observer
asinterviewer
as semiotic synthesizer
CHILDREN
as individuals
as pupils
as conversationalists
as interviewees
as "teacher-actors"
PEDAGOGICAL INTERRELATIONSHIPS
SCHOOL CONTEXT

Figure 6 Interactive Context for the Analysis of the Semiotics of an Elementary Classroom

The Researcher

My presence as a researcher in the classroom had a different quality from the presence of Mrs. Wayne and the children. I remained extraneous to the classroom situation and when the research schedule was completed, I left as abruptly as I had arrived. This outsider-looking-in position had its advantages and its disadvantages. My detachment from the pedagogical interrelationships between Mrs. Wayne and her class allowed me to concentrate fully on how pedagogical meaning through semiotics was being created in the classroom. I was removed from the intricate evolution of their meaning-creation. I watched as they made meaning.

If I had been a part of that meaning-creation, I could have written an "inside-story". But I chose a different perspective. In serving as a recipient of the interpretations that Mrs. Wayne and the children gave to their ongoing life, I offer a complementary view, that of observer-interviewer-interpreter. I lived within the classroom beside Mrs. Wayne and her class rather than with them. As Crick points out, what is important is how "two sides of the encounter arrive at a delicate workable definition of their meeting" (Crick 1982:25). Unless the teacher is the researcher, I find it difficult to believe that a co-partnership with the resident teacher is as readily found as is the observer-researcher position.

Contextual Links

One must recognize that the core pedagogical interrelationships between teacher and children do not occur in isolation. They find pedagogical meaning because they comprise a class with specific characteristics, qualities, and needs. Further, this class (as others are) is set within a school context and pedagogical meaning and specific sign systems are created by and affected by the philosophy, activity, and intentions of the school as a total entity. Another important contextual influence is created by the teacher in fulfillment of curricular obligations. This "pedagogical text" has been observed as an ongoing phenomenon whose traces are reflected in the individual and group documentation created by Mrs. Wayne and the children.

Beyond the pedagogical context shown in Figure 6 is the vital life of teacher and children outside school space and beyond school time. While I made no specific attempt to explore this aspect, it was inevitable that both teacher and children would make reference to their "other" world. As will be seen later {in "Semiotics of Interpersonal Relationships" (infra:275) in particular}, the weight of the full context of their lives can have an important semiotic influence on their pedagogical interest, intentions, effort, and expectations, and consequently on the meaning they bring to and take from their pedagogical experiences.

So it was that for eight months of a school year, Mrs. Wayne, the children in her class, and I set out on a search for the semiotics of an elementary classroom--especially as these many and varied sign systems give rise to meaning-creation and meaning-sharing. Mrs. Wayne's and the children's participation in my study and their reflections on their pedagogical experiences form the strands of meaning that I used to interpret how a classroom means and what it is to be a semiotic being in a classroom.

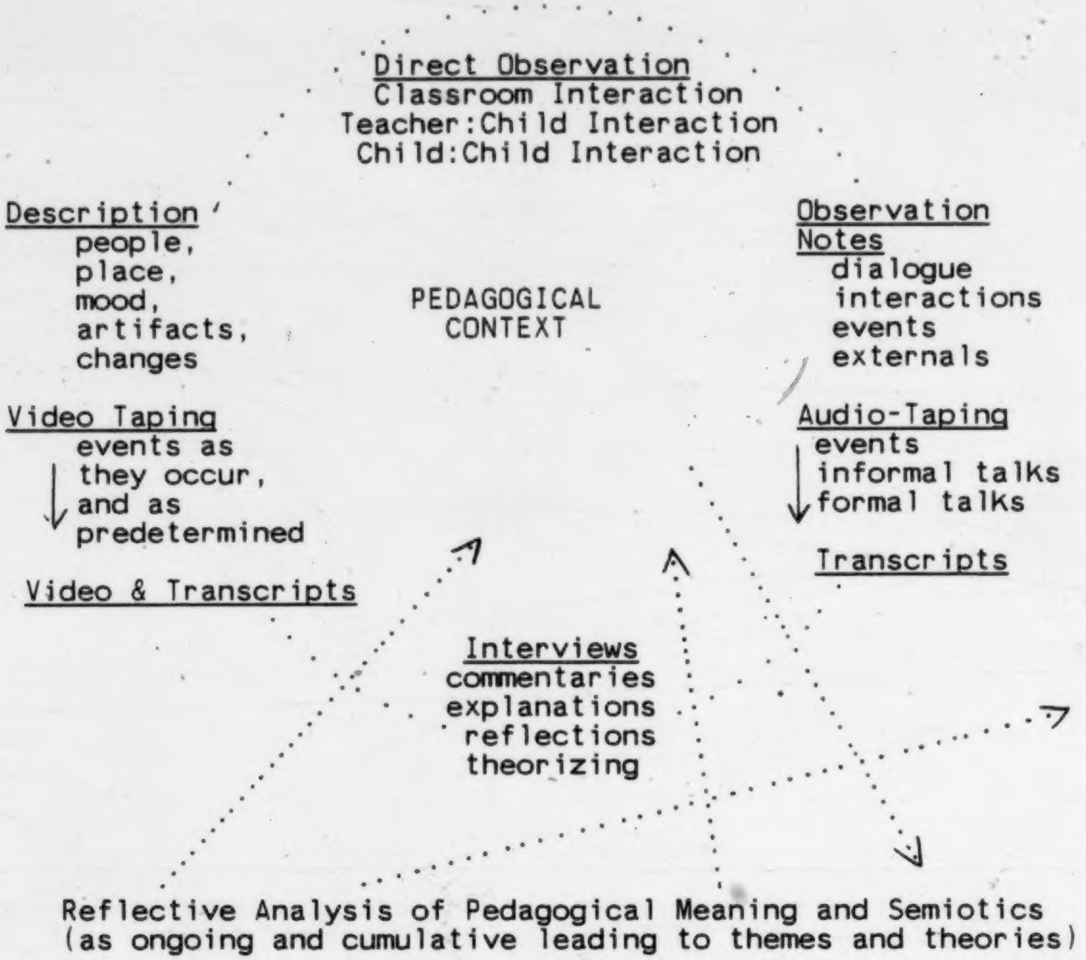
From the first conceptualization of this study to its final documentation, I have become a semiotic weaver taking up these bright and multicolored or softly muted strands of meaning and woven them into a pattern that I hope echoes the meaning-creation of that classroom and the world-ordering unity that Mrs. Wayne and her class accent with details of their idiosyncratic life. As with a completed tapestry, the final galley of a book, or the edited copy of a film, not all the gathered material is used nor is it needed. Reliving the totality of the 1983-84 school year with Mrs. Wayne and her class (even if it were possible) still could not tell the full story of the semiotics of an elementary classroom. So it is that there are many skeins of pedagogical meaning that have not even been opened, many from which only a small measure of meaning has been taken, and some that I have unravelled as well as I could, given this time and circumstance. What is given here is but a beginning.

Research as A Semiotic Process

Research may readily be considered a semiotic process insosfar as it translates from one integral sign system to other sign systems. Research begins in the context in which human beings communicate with one another, both on the basis of an ontological need and of social necessity with its characteristic synchronic interrelationships. It ends in a text which can only report that human experience in a diachronic mode. It takes spoken signification and translates it into written signification, a complex and unstable transformation that has attracted the attention of many scholars, notably Barthes and Ricoeur. At the fulcrum of this transformation is the researcher (writer, artist, musician, architect, songwriter, designer etc.) with his signs, tools, and models (Bunn 1981) attempting to make as representative a "fit" as possible.

As shown in Figure 7 and noted earlier, the repertoire of research techniques commonly used in educational research includes direct observation and descriptions of events and the recording and interpretations of interpersonal interactions, dialogue, nonverbal communication exchanges, artifacts, and contextual links. Technology has added audio, film, and video recordings--each with their unique sign systems with attendant advantages and disadvantages. But by using a variety of approaches and techniques, I am assuming

Figure 7 Semiotic Research Techniques Used in the Collection of Experiences and in the Creation of Texts


Direct Observation
Classroom Interaction
Teacher:Child Interaction
Child:Child Interaction
Description
people,
place,
mood,
artifacts,
changes
PEDAGOGICAL CONTEXT
Observation Notes
dialogue
interactions
events
externals
Video Taping
events as they occur, and as predetermined
Video & Transcripts
Audio-Taping
events
informal talks
formal talks
Transcripts
Interviews
commentaries
explanations
reflections
theorizing
Reflective Analysis of Pedagogical Meaning and Semiotics
(as ongoing and cumulative leading to themes and theories)

that I can come closer to understanding how people understand one another and how what they know is shared with others outside their intimate world. In this study, I have recognized these techniques not only for the service they lend to my task but also as semiotic instruments creating as well as recording semiotic avenues of communication. For example, the one-to-one interview is different from a solitary researcher's personal description. The instruments used are semiotically different too: the audio-tape gives emphasis to language; the video-tape, to action and gesture.

The Semiotics of Research Tools

Information gained through various technological aids bears traces of the transformation from experience to documentation. Such information is couched in the language of the transforming medium. For example, audio-tapes are most effectively used in one-to-one or small group dialogues. Sensitively-derived transcripts must extrapolate from the recorded sound, descriptors of "how" language was used in its affective dimension, e.g., "softly", "slowly", "with hestitation", "emphatically", "vehemently". The "saying" is personalized meaning, but what is wrapped in personalized meaning is the "said". This meaning is derived simultaneously from the words spoken and the way in which they are given. These signs give indexical access to internalized meaning (to individuals' thoughts and feelings) in a way that might be overlooked during the video-taping of scenes of interaction. In turn, video-taping offers interpretations other than what the audio-tape can present, i.e. clarifying the significance of gesture and expression in the creation of meaning.

The use of these techniques allows me to capture events and select discernible moments but the influence of the technique leaves its trace. By selecting the technique, we select the way in which we"look", record, and share meaning. Implicitly, we mesh our interpretation of meaning with each sign system. For example, to return to the taperecorder: it is not often recognized as a form of auditory-editing. It records from the total context only what is within its receiving range. Because that range is commonly limited, what is recorded is enscribed. Beyond that range, what might have contributed to or affected the creation of meaning is not acknowledged, perhaps not even recognized as influential.

Further, audio-taping removes the sound portion from the density of the experience and allows for an analysis with a specific focus but it is an incomplete one. It cannot include the nonverbal orchestration of the body that accompanies the exchange of meaning. Consequently it lends importance (perhaps greater than it merits) to what is being said. Simultaneously,it seems to ask and give reason for momentary reflection prior to giving one's response. Spontaneous and informal conversations suggest a more off-the-cuff, unconditioned response. This particular "texturing", characteristic of the medium used, may have a significant impact on the meaning given and subsequently interpreted.

The process of transcribing also influences the style and impact of the sign systems used and understood and the context in which these are to be understood. At each phase of layered distancing from the referent experience, the possibility of distortion or deviation from the original meaning is increased.

The video camera is of particular significance to me. I consider it a co-partner in my research. But, just as I am not, it is not immune to inherent semiotic qualities and limitations. However, as Sontag writes:

> And no a tool, save the camera, is capable of registering such complex ephemeral responses, and expressing the full majesty of the moment. No hand can express it, for the reason that the mind cannot retain the unmutated truth of a moment sufficiently long to permit the slow fingers to notate large masses of related detail.
>
> (Sontag 1977:206-207)

Sontag writes eloquently about the power of the camera, referring to it as a new visual code, a grammar, and an ethics of seeing that provides an anthology of images (ibid.:2). Further, it is a note-taking technique on potentially everything in the world, from every possible angle (ibid.:176). Finally, photographs [and video] are experience captured by consciousness in its acquisitive mood (ibid.:3-4).

In this study, the camera is used as an "instrumental document" rather than as an aesthetic tool (ibid.:176). Its main value lies in "dealing with things everybody knows about but isn't attending to" (ibid.:200 citing Emmet Gowin). Repeatedly the teachers, the children, and I were pleased (and occasionally startled) to "see" something more in what we thought to be familiar and already fully understood. The visual image centres our scanning instincts and, in narrowing our analytical field, insists that details be recognized and implications be considered. Despite the obvious advantages, Plummer points out that the camera is an unextradordinary, unremarkable but surprisingly uncommon way of obtaining information (1983:83). He is referring to the still camera (as is Sontag). Video, on the other hand, is daily drawing more and more researchers to its use. It may be that anthropologists, ethnographers, and educational researchers are its most ardent users.

Nonetheless, there is relatively little conscious recognition (outside the field of visual communication) of the video camera as a semiotic instrument creating its own language and stylizing the message it gives in subtle but notable ways. As Sontag (ibid.), Heider (1976), Worth and Gross (1981), and Lotman (1976) emphasize, filming is a form of visual creation and visual editing with power to instill the illusion of reality. We are so accustomed to the effects of lenses, montage, special effects, and flashbacks that they have become implicit in our understanding of the depicted experience. What is forgotten (and what is perhaps unimportant when we are consumers rather than creators or interpreters of visual images) is that the camera forms a sign system of its own which manipulates time and space and, more subtlely, its viewers. As researchers, we cannot ethically remain unaware of this semiotic influence nor delude ourselves that the video tapes contain the equivalent of reality. They are but a trace, a text invaluable yet incomplete.

This said, I maintain that for all its intrusive power and for all the inevitability of the researcher's subjective selection of fragments of human experience, the camera provides us with

> the force of photographic images which come from their being material realities in their own right, richly informative deposits left in the wake of whatever emitted them.
>
> (Sontag ibid.:80)

The still camera and the video camera will continue to be part of my research tools--semiotic tools--allowing me to explore and to record human experience at the moment of its creation and in details that my eye may not--cannot--see at that moment. For as Plummer states, the camera is the answer to a researcher's dream: life as it is lived, accurately recorded as it happens, and constantly available for playback and analysis (Plummer ibid.:31).

Numerous authors remind researchers of the necessity of returning to the informants for verification of the researcher's interpretation of their lived experience. This triangulation is important. However, it should be extended to an examination of the instruments used to obtain the initial impressions, information, and insights. In their semiotic modes, we may find much to authenticate meaning and to open avenues for further exploration of how the creation and sharing of meaning occurs.

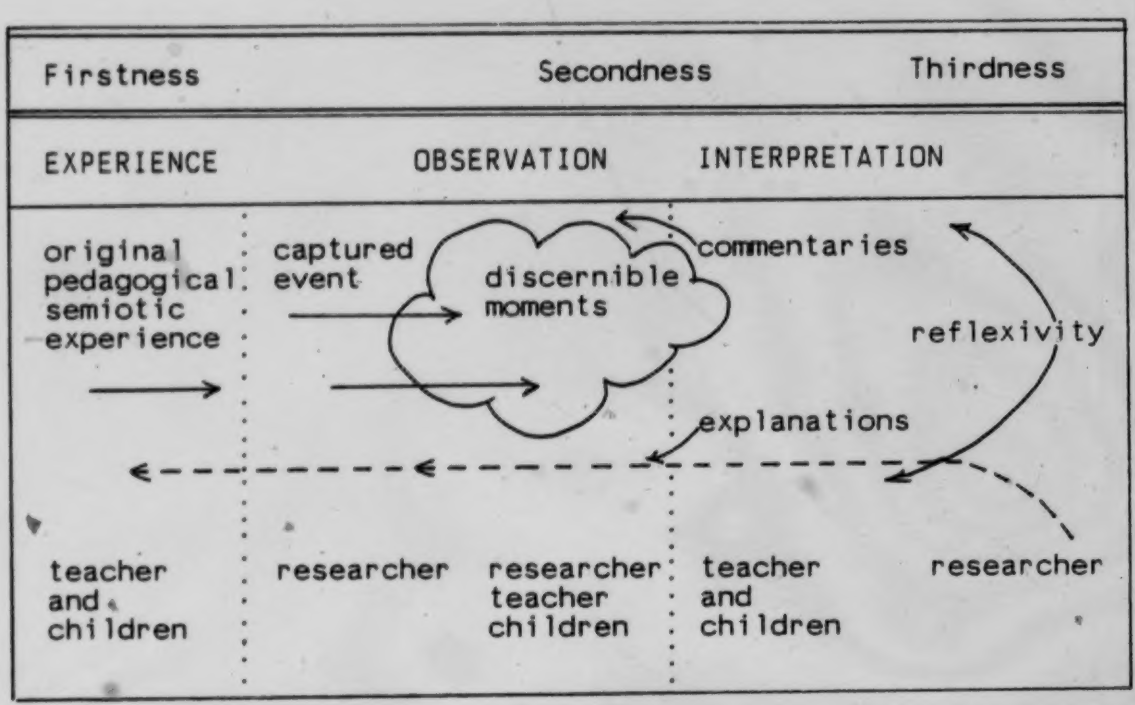
The video tape, for example, permits the recording of the original experience to be played back to its creators. This information becomes a constant (with all the limitations of selective filming) from which creators, researchers, and subsequent interested persons can draw their interpretations. While the meaning attributed may have variations, the video "evidence" becomes the core against which first-hand observations, later commentaries, and other information can be considered. In this study, teachers and children were able to "see" their classroom life re-enacted on video (both in its original form and from an extending perspective) because their attention was directed toward the interpretation of the event rather than to its creation. The possibility of this distancing, particularly for the originators of the action, gives its own aura of meaning, one which adds to initial understanding for everyone concerned. The iconic nature of the video-tape circles back to its source. It is the closest link that can be made between our experiences and our reflecting on them, alone and with others.

Research Related to The Peircean Hierarchy of Signs

To this point, I have considered research techniques as part of the semiotic process of obtaining information. However, it is important to see these research techniques in the fuller research process. Returning once more to Peirce's hierarchy of signs, it is possible to look at the research process as an evolving form of signification. As shown in Table 4, this study focuses on the pedagogical interaction between teacher and children as meaning-makers through semiotics.

This original and originating experience may be considered "firstness", wherein the signifying persons use signs to differentiate between what is important to them and what is not. Parallel to the emergence of the experience, the researcher becomes a "reader" of their semiotic exchanges. However, the "firstness" already becomes a "sign" in the mind of the researcher as the experience filters through his semiotic perspective. The recording of the "firstness" of the "actors" (the teacher and the children) becomes "secondness" for the observer--captured events and discernible moments to be interpreted at a later time.

Table 4 Research as a Semiotic Process As Expressed in Peirce's Hierarchy of Signs


Firstness
Secondness
Thirdness
EXPERIENCE
OBSERVATION
INTERPRETATION
original pedagogical semiotic experience
captured event
discernible moments
commentaries
reflexivity
explanations
teacher and children
researcher
researcher teacher children
teacher and children
researcher

The original experience takes on "secondness" when the researcher uses the captured signs as a means of eliciting from the teacher and children their interpretations of how they derived pedagogical meaning during that experience. Teacher and children become "readers" of their own original semiosis and creators of new signs during their explication or uncovering of the original experience. This initial interpretation creates, through their commentaries and explanations (in themselves semiotic), the basis for "thirdness" interpretation when the teacher and children reflect back upon their original experience and upon their first interpretations of that experience.

In the mind of the researcher (my mind), the original experience as a semiotic experience takes on "thirdness". At this final stage, the researcher becomes a semiotic synthesizer consolidating:

> the "firstness" experience--the captured events and the discernible moments of the the original experience as created by the teacher and children
>
> with
>
> the "secondness" experience derived primarily from their commentaries and explanations and reflexive thoughts about the original experience but also including their awareness of the "secondness" experience (their participation in interpreting their experience)
>
> to create
>
> the "thirdness" semiotic experience derived from all the above and from the researcher's final "reading" of the entire semiotic sequence. This also involves "reading" across the experiences to discern particular relationships, themes that might be drawn from interconnecting meanings. This "thirdness" experience results in a final interpretant--a semiotic documentation.

When the research process is viewed in this light, it follows that experience-collection is a semiotic process and that the documentation of that experience provides distinctive texts at each phase of the research process. It is in these texts that layers of meaning are to be found, one building upon and illuminating another. In this study that cumulative meaning takes us further into a clearer and richer understanding of human beings engaged in a pedagogical process.

***

The Discernible Moment as a Semiotic Key to Interpretation

The Interpretation of a "Discernible Moment"

From the wealth of experiences garnered from my exploratory study in the Spring of 1983 and from my observations in a grade four classroom during the 1983-84 school term, it became obvious that some critical selection had to be made before the process of analysis and interpretation of pedagogical meaning in an elementary classroom could begin. Two notions have governed my approach to this classical dilemma: (1) captured events and (2) discernible moments. The term "captured events" is used by Parkin (1982:xviii) in his introduction to Semantic Anthropology. Concluding his discussion of the implicit and frequently unarticulated power of the researcher-interpreter in determining formally the "meaning" of any given culture or group of people, he writes:

> The captured event takes priority over our preconceived representations of status. The image of capture is appropriate...to move towards an "apprehension" of the power in our own as well as others' discourse.

Consequently, captured events are those moments from the total flux of pedagogical interaction that I was able to observe or, more precisely, chose to observe and record for future reference. In effect, these captured events represent only the fragments of reality that I was privileged to catch. It is from within these captured events, recorded in observation notes, memory, and on audio and video tapes that the discernible moments are drawn--moments that speak to the interpreter (whether that be teacher, child, or researcher).

It is essential to recognize that the life of the classroom as it is lived by the teacher and the children is not the life that the researcher can draw upon. That life is inherent in their understanding and is only infinitesimally accessible to a researcher. What is accessible to the researcher are only those elements and characteristics that he is able to recognize as important and relevant to his particular intent.

As witnessed by the researcher, captured events are of necessity only a sampling of what occurs without pause within the classroom. In attempting to highlight the flux of human experience, it is easy to negate the differences created by time and circumstance. What is witnessed is a captured event--an event that does not get away--an event that (out of all that occurs in the classroom) attracts the researcher's attention, interest, and interpretation.

This differentiation is important. For just as it is impossible for the researcher to experience the totality of classroom life, it is equally impossible for the researcher to witness, record, and attend to all the events that occur during his presence. There is an undercurrent of interpersonal relationships that continues without his notice or interest. There are subtleties of language, gesture, attitude, and behavior that (despite all intentions) will escape the eye, pen, taperecorder, or camera. In the end, the captured event is as much what insists upon the researcher's attention as it is what he looks for. The event captures him by some inner quality--some sign--as much as he deliberately sets out to capture the event. While much may be captured, this does not guarantee that such events are necessarily significant to a given inquiry. Nor, by simple expediency, can all captured events be analyzed in depth.

More often than not, the researcher does not at the time of the event recognize the existence of the captured event or its significance. It may be only in the repeated analysis of notes, tapes, video clips, or memory fragments that the importance of the event matures in the researcher's mind, that it lifts itself out of the ordinariness of interaction to claim--to proclaim--its value. But one must begin with what is retained in one form or other from the experience and sweep of pedagogical interaction and growth. One must begin with the captured event.

It is then within the captured event, tangible or intangible in its traces, that one finds the "discernible moment"--the moment that carries the significance of the event--the moment that tells us what sets this event apart and gives it its luminosity. The discernible moment is that fraction of time wherein some thing gives us notice, draws our attention and holds it, or creates a puzzle for our minds to solve. It is the moment when we say, "Yes, there _is_ something here. Wait. We must find out what it is." Or it may be the moment when we _know_. When, from all the tumbling possibilities, we know what it is. "Of course. How could I have missed it! _That's_ what it means. Yes, yes!"

When others can join us in such delight, the discernible moment is confirmed. When we alone find such insight, it is no less a triumph. It is that moment when, from the well of our own experience or from the richness and sequence of the event itself, we recognize that something significant has been given. Through the language or through the expression of behavior of those involved, we are given a sign that stands for something else--something that the event has to say through its own evolution and its own underlying meaning. It is in the discernible moment that the moment is more than the mere passage of time. It is the embodiment of a person's effort to give meaning to a life. It is a moment when meaning may be "said" and brought to the surface. In that very act, it becomes meaning for others to share.

While it may be that we find the discernible moment within the captured event, it has a particular attraction of its own. It is highly probable that some discernible moments may have called us to the captured event in the first instance. But discernible moments may be deceptively embedded in the captured event, and their true character may not necessarily be conspicuous. Yet something makes us stop at a point in the event we have preserved. What is it? And if it _is_ a discernible moment, what is a discernible moment?

I coined this term in an earlier paper (McKie:1982) in which I described observing the relationship between a speech pathologist and his clients. Within that experience were poignant moments when, from the halting language of aphasics and their non-linguistic struggle to _make_ the therapist understand, I saw more than the objective surface of their interactions. I _felt_ that struggle. As much as any person can "live" the sense of another's life, I felt I understood--not the particulars of their communication as much as their aching to be understood. And in that moment, in that discernible moment, I recognized something important had happened to me. In that discernible moment, I knew I had learned something more fully than I had ever know before. I understood. In the roots of that moment was a clarity of knowledge that impressed itself upon me with such surety that it could not be denied. I knew.

One particular example may suffice. I had been waiting in the speech pathologist's office while he went to the reception area to meet his client. He returned with a handsome young man who, with ease and social poise, introduced me to his mother and then to his sister. He had been seriously injured in an oil rig accident but now bore no physical signs of the trauma. He was directed to sit at a table, facing the speech pathologist. The rest of us sat on chairs around the small room. The speech pathologist began a final assessment of the young man's verbal abilities prior to his being released from hospital and returning to a small northern community. On the table were ten commonly used objects: a pencil, a cigarette package, a comb, a spoon, and so on. The young man was asked to give the speech pathologist the book. His hand hovered over the items, paused; he handed the box of matches to him. Asked for the spoon, he handed the pocketknife. Asked for the pencil, he handed the comb.

As I watched, I learned more about the tragedy of aphasia than I could ever know from the finest dictionary or medical textbooks. There I would only find: aphasia from the Greek, a-not and phanai-to speak, meaning any partial or total loss of the power of articulate speech, usually due to a brain lesion. There, I would find the pathology of aphasia; I would not find the person afflicted with aphasia.

I continued to watch. The young man could not find and bring to speech the word for "table" but running his strong hands repeatedly around the edges of the table kept saying, "This...this rectangle....The book is on this...this here... this thing." Then I sensed his mother watching me. She was looking at me with such hostility and pain that it was almost palpable in the air between us. In her eyes I saw a sign and there was no question what it meant: "How dare you --a stranger--be here, watching my son in all his vulnerability! By what _right_? _My_ son!" The discernible moment could not be denied. As much as one can share another's pain, I _knew_.

So it is that simply stated, a discernible moment is when you know you know: when you know something _more_; when the experience, your thoughts on it, and your thoughts about your experience _with_ the experience all come together to become a discernible moment. A discernible moment is when the signs given by the persons within the experience stand for something that is significant in your understanding. More formally, discernible moments may be regarded as brief or extended periods of time, when subjective responses to identifiable or implicitly revealing events, dialectical dialogues, interactions, or relationships suggest to the individual that some viable exchange has lifted meaning above the ongoing flow of behavior and communication, has given an aura to meaning that makes it stand highlighted from the rest, noticeable and important.

A discernible moment is then a fragment of time and what that fragment of time hold within it that is recognized as being separate and different from the totality of experience from which it arises. Its separateness, however, does not set it apart as much as it focuses that moment as having particular qualities that lead to a more penetrating understanding of the event of which it is a part. It becomes separate when we give it recognition but its meaning is derived because it remains rooted in the event. Its meaning is possible only because of the context that nurtures it.

Because of its transitory nature, the discernible moment may easily be overlooked. Unless its distinction is an obvious consequence of the dialogue or interaction, the moment may remain undifferentiated. Consequently, to distinguish that moment from the rest calls for a keenness of judgment and insight, for a sensitivity of the nuances embedded there. It calls for an openness and willingness to work toward a fuller meaning than the immediate or conventional.

Using this notion of discernible moments in educational research is a delicate matter. The authenticity of their identification and judgment of their value falls to the researcher and is subsequently vulnerable to external questioning. However, as Polanyi writes in The Tacit Dimension (1958), it is only through a series of personal judgments that we can begin to formulate an understanding of what cannot be captured in language for the sharing. Here, in La Barre's terms (1979), intuition as "embedded learned meaning" plays a crucial role. Some inner sense identifies a given moment within a dialectical relationship as having moved from the unnoticed to the significant.

While the captured event is recognized as such by its mere external availability (by its documentation in one form or another), the discernible moment conveys another quality. Semiotically, something within that moment becomes a signifier pointing to something we may not yet understand. But the sign persists in its pointing. It is this quality that intuition recognizes, not on the basis of hunch artistry (ibid:27), but on the basis of sensitivity to the signs emanating from the experience observed. While the focus of meaning is the individual (Martin 1981:169), the individual (in this case, usually but not exclusively, the researcher) draws on a repertoire of sign systems learned and substantiated through time.

These sign systems may be implicit as well as explicit, cues that are "read" through the filters of experience, empathy, or interest. "And there shall be a sign....", and whether that sign is a phrase, a nuance, a gesture or a smile, a nervous quiver of the voice, a moving together or a turning aside, it triggers an alertness in the observer that preserves that moment in memory. Its signification may be immediately clear. Or it may lie fallow until time, other experience, or reflection show it in a new light and, in that light, in a new understanding.

As my research continued, the importance of discernible moments became clearer, if not crucial. It is from these discernible moments that I draw much of my interpretation of the semiotics of pedagogy--moments that the children, the teachers, or I, found predominating our comments and exchanges. Further, many of what I recognized as discernible moments haunted me until I came to some resolution of how and why they had provoked my curiosity, uncertainty, or unease, and how they led me to some understanding of the meaning created in front of these moments.

Why, when I ask a kindergarten boy where he looks when his teacher is talking, does he answer, "At her chin."? Why, when invited to enact a teacher in the classroom, do so many children spontaneously portray a disciplining scenario? Why is a grade four girl uneasy about her teacher conducting a language lesson in the playground? Why does a boy swing his feet under his desk in a rhythm that seems to be in synchrony with the tempo of his teacher's speech? Why does his tatoo stop and start as her voice does? Why? The question recurs and recurs. Why does something not let me go on to other things? What is it that marks that moment and invites me into it? What is it that holds me to that moment? Is it because, in some way unclear to me, I hear a resonance emanating from what has been said, enacted, or lived? Is it because what is there is so obvious that everyone would hear it too and stop to enquire? Or is it that I alone hear that resonance of possibility? And if only I hear it, does that make it unique, unimportant, or critical?

In my search to explain both a discernible moment and why it draws me in, I am led inevitably to search for the signs, to the semiotics of the event and their significance. The key to understanding the meaning of a discernible moment, to breaking through its puzzlement, is enveloped in and by the signs given: the child's unusual answer, a particular hestitation, a contradiction from what we have been led to expect, an opinion tentatively proposed or empathically denied, an action unexplained, or our own inner sense of wonderment. There is, in the discernible moment, a veering from the anticipated, a detail that is subtle but different in its ambience, a coloring of meaning, a certain tonality other than the main theme. It is often something that we sense rather than know. The knowing comes with reflection and is strengthened by the very signs that give it notice. Again, its meaning is not apart but integral.

Researchers sensitive to the nuances of semiotics in pedagogical interaction truly participate in the Peircean interpretant. They come closer to the extended field of meaning that emanates from a given context than those who place primacy in causal interpretation. They link the sign (representamen or signifier) and the object (signified) with intimate cognitive and affective dimensions that arise only in the inseparable interplay of the triadic relationship. The interpretant is the summation of the expressive act, its totality. Neither the sign nor what it signifies nor the signification stand alone. Rather, together they create meaning, a meaning only possible because of their implicit interrelationship.

As an example of the identification and interpretation of a discernible moment, it is useful to return to the captured video image of a grade two boy's swinging feet. Alone, it tells us only that the boy is swinging his feet. But the boy's feet swinging in time with the teacher's speech adds a nuance to the sign, to the image, and to its implicit meaning. A relationship begins. Now we ask, "What is signified?" and "What does it mean?" And in the process of speculating, of exploring possibilities of meaning, and of juxtaposing sign and signified while searching for the dynamics that holds them together and moves meaning beyond, we reach an interpretant, a network of meaning that encompasses everything, that coelesces into a knowing, into a discernment that, in turn, is compatible with all the elements and the context in which the sign nurtures itself.

What that discernment is may vary with each interpreter. For me, the boy's swinging feet suggest that the relationship between child and teacher can be so all-enveloping that the bodily rhythm of one sets in motion correspondent and empathic movement in the other; that there is a bodily sense of being together in this experience; that just as the child's mind follows the articulated patterns of thought created by the teacher, the child's body is simultaneously and intimately relating to the physicality of the teacher's voice, following its inflection, pauses, and silences in mirror-images of movement, cessation and resumption, and final stillness.

In this moving, in this doing, the child is intimately involved in the creation of meaning, his meaning. And from the sign given to us by the boy's swinging feet, we sense that pedagogical harmony is more than perceptual, more than linguistic, that it is found in the synchronization of body as well as mind. And knowing this brings us closer to an understanding of the criticalness of the teachers' allowing movement rather than suppressing it in the children, of their seeing this body synchronization as a complement of givingness, of willingness to participate in the learning experience. It is, perhaps, our only outward sign of the child's involvement in the pedagogical experience. As such, it is a powerful index and a rewarding one.

So it is that the interpretant grows from this small sign (a small boy's swinging feet) to somber implications for the pedagogical relationship between teacher and children, for teacher education, and for an examination of what it is that society wants its schools to achieve. The aura of meaning expands and, in its expanding, brings us to a discernment of something that we might not have given credence to before. Can a child's swinging feet tell us so much? Oh yes. For here, the sign and its object or signified become the interpretant. And turning back from an interpretant to the originating sign and its context, such a resonance of possibility--of meaning--is indeed viable.

The aura of authenticity of a discernible moment may be strengthened when other such moments, holding the same or similar possibilities, can be brought to it. While one discernible moment may be so rich in its meaning that no other evidence is necessary, complementary examples lend an inner force to the interpretation. When I can say that in addition to the small boy's swinging feet, I saw many other children in similar atunement with their teacher, doubt (if it existed) should lessen.

Therefore, to the boy's swinging feet add: a girl on dress-up day seating herself in the reading circle with gestures that are an echo of what the teacher had done seconds before, (smoothing the back of her skirt before she sits down, and crossing her leg over her knee). Add, a child gently leaning against the teacher's shoulder and watching as she marks his work at the round table. Add, too, as seen from the side of the classroom and captured on video tape, the conspicous tilt of an entire class toward the teacher at the front of the classroom. Add the sprawled body-hang on the back of the desk (so typical of adolescence), yet the head toward the teacher, following physically and mentally. (The ambivalence of independence and dependency?) And, finally, add the continual shift of children's bodies and the intangible axis of their eyes in relation to a teacher's movement about the room during a lesson. With these semiotic examples, the distance between the boy's swinging feet and the extension of meaning I have attributed to it decreases.

But add, too, the insights of Uexkull (1979 cited in Bauer 1981) in describing the symbiosis of one being and another in the learning and expansion of meaning as they move through the primacy of language from their own functional circle to the broader situational one. Add Lewis and

Freedle's research (1973) on early infant interaction with their mothers. While it is rare indeed that the meaning of a discernible moment (as one person understands it) is precisely as another person understands it, its elaboration does come to a common point of understanding and possibility. It is true, as a nine year old girl commented to me, "You can't see inside kids' heads, can you?" But I can "read" behavioral signs given, and suggest, through these examples, the resonance of possibility. As one example acts as a counterpoint to another, it may lead us into a range of reasonable agreement and sensitivity.

We are all self-defining meaning-makers (Parkin 1982:v) but we do not live in isolation. We engage continually in dialectical relationships with one another in which our own knowledge, experience, and intuition consolidates and moves both meaning and understanding forward. That relationship is semiotic and may well pivot, from one of us to another, on the basis of discernible moments and on the signs within those moments that give us pause, purpose, and understanding.

In the end, I put my trust in the discernible moment. It gives me a way to choose. To limit. To explore. To come to an understanding. To discern something I might have easily passed by. To honour something that might be important. To honour something that I believe to be important. To add my particular vision to the pool of human understanding of the pedagogical process.

The Challenge of Recognizing a Discernible Moment

As elusive as the discernible moment may be, it has semiotic qualities that provoke our attention. While it is not possible to formulate a particular and consistent code that reveals the discernible moment, it is possible to suggest some of the features that may function as leads in sensitizing one to their possibility. It is important, however, not to regard these characteristics as definitive. Each inquiry, each situation, will evoke discrete discernible moments.

Initially, in identifying discernible moments, I responded to these features intuitively. While transcribing material from tapes and videos, I delighted in finding (because I was searching for them) important episodes in the flux of classroom interaction. The intentionality of my search made me receptive to the nuances of language, gesture, action, and interaction. With the pause and rewind control on the taperecorder, I was able to stop the instant something, some sound-sign, attracted my attention. On the video editing machine, I could replay repeatedly (in normal or slow motion) a clip of some teacher-child-children interaction. However, this only explains what I did, not why, nor what in the event made me stop to consider and reconsider what it is that invites me to understand more.

It is easy to say that I responded intuitively and surely that is true. I responded from my experiences of some thirty years in education, years that have built a particular brand of embedded learned meaning. But again, this only tells what I did, not why. That is not as easily explained except to point out I have long been fascinated by the kind of aurora borealis of meaning that radiates from signs and symbols in film, literature, art, and human interrelationships. But an example may be more useful than explanation.

Note, however, that because this example has been selected and is (by inference) accepted as significant, its very selection and presentation here circumvents (for the reader) the first step of discovering within captured events a moment of particular value. Simply, this episode "speaks" to me--"signs" to me--and lifts itself from the total context to be noticed. It may not have brought meaning in its original emergence to anyone other than Sarah or to me. It is just here that the semiotic signature of a researcher is evident: in what is "seen", how it is analyzed, and in what interpretation is drawn from it. Or, semiotically, what sign or representamen is read, what of its object or signified is appreciated, and what interpretant or signification is granted to this specific context of semiosis?

It is appropriate now to explore this example of a discernible moment for the significance it holds for me:

Sarah, a nine year old in grade four, and I are talking about how children know what the teacher is thinking or what mood she is in by the signs she gives. I play a video clip of a scene from her classroom. Then, freezing the scene on the monitor, I ask:

> [When you see her like this, with her arms folded, what does it mean?]
>
> > Sarah: That means she's waiting. {Demonstrates with her own hands folded across her chest} Like this is waiting... {Demonstrates a tighter grasp on the forearms} This is a bad day.... {Places her hands on her hips} And this is a bad day...
> >
> > {Places hands loosely joined in front of her} And this is a good day. And she'll have a smile not a frown. When she had the staple in her finger, she had a frown face.
>
> [Oh yes, there must have been pain too.]
>
> > Yes. She had a hurt look, too.
>
> [And how did you feel when that happened?]
>
> > I felt scared. I thought she was going to lose her finger or something.
>
> [What happened then?]
>
> > She pulled the staple out. It went right in, but not right through her finger. She went like this: {demonstrates removing staple} real slowly...and shakey.
>
> [Did that make any difference in how the kids behaved after that?]
>
> > Yeah. We were quiet so that maybe her pain would go away.
>
> [Oh, I see. You were really sympathizing with her?]
>
> > Hmmm.

[Why is it sort of scarey to see your teacher hurt?]

> {Speaks quickly} I just don't like my teacher getting hurt and I feel scared.

In analyzing Sarah's account, it is likely that we look at its totality. What is it about? There are a number of important things in what she says and does. At the beginning, Sarah gives us a very graphic representation of the teacher's nonverbal communication. She is also aware that there are subtleties of meaning involving the hand, body, and facial expressions. These all contribute to the message that she perceives the teacher giving and one that she interprets as reflecting the effect of the children's behavior upon the teacher. Sarah's spontaneous demonstration of the teacher's gestures help us in two ways. First, she allows us to see what it is that the children see when they determine how the teacher feels and how they should govern their own behavior. Second, her demonstration points out that words are not enough to give an adequate explanation and that, to express as fully as possible what she is implictly telling us, she too must incorporate nonverbal signs to ensure and enrich her meaning for us.

All this is important and adds to our understanding of the semiotic network that creates and sustains pedagogical interaction between child and teacher. But there is more in Sarah's account. It is important to note that the inclusion of the teacher's mishap with the stapler arises from Sarah's own extension of the conversation. It is something she gives totally unsolicited to the researcher. Many discernible moments are found in such circumstances. They are often not what is asked but what is given...and given freely.

When reading the stapler account, we are struck by the relative ordinariness of the occurrence. It is easy to misjudge and suffer the consequences of a misplaced staple. It is not unexpected that the child should be surprised when this happens. It is a situation that elicits surprise in everyone concerned. And of course the staple must be removed. The finger will hurt, is hurting. The sequence is predictable. Even the child's response of being empathetic to the teacher's misfortune can be taken in the context of what would likely occur in any similar situation.

But there is a pivotal difference between: "I felt scared. I thought she was going to lose her finger or something," and "I just don't like my teacher getting hurt and I feel scared." The first statement refers to the episode described. In the second, Sarah generalizes. The nuances in her words suggests something more. Here lies the cue--the resonance of potentiality--in the moment that invites further consideration. Why is the child frightened? No, scared, which means more than being frightened. Here we must stop, to blend our moment with that of the event described with the moment that waits. The moment waits to lead us to more than what we thought we knew. Why is the child scared if the teacher is hurt? Is it only a natural reaction, one that every child would feel? Perhaps every child would not. Sarah does. Why?

We come upon this moment because there is in it a small extension of the shadow of meaning that Sarah puts before us, a extension that seems so insignificant in the context of all else she spoke of. It is, however, an extension that (when we give it pause and consideration) gives us more than we imagined possible. But discernment does not herald itself. It remains still and waiting. Will it be uncovered? Ignored? Its power comes only when what that moment holds before it, is understood. What *is* meant here?

I am scared...	Here, an intensity of feeling.
...*my teacher*...	Here, a child's possessiveness.
...*is hurt*...	Here, the pain.

But we are still not at the fullness of meaning that the moment suggests. Again, taking these emphases with us, we ask, "Why is Sarah scared when her teacher is hurt? What is there about the situation that highlights it? What is implicitly given here?"

Sarah is afraid for the teacher and her fear is greater than the incident of the stapler. Is she also afraid for herself? Does she see an implicit threat to the stability she has entrusted (as many other children have) in the word, image, and person of her teacher? Are not teachers infallible? Are they not there to help children? In the sign that the teacher is hurt and needs help, Sarah's seemingly secure world is disrupted. Does she imply in her words--her sign:"I just don't like my teacher getting hurt and I feel scared."--that she realizes, implicitly, that her omniscient and omnipresent teacher is suspectible to risk and dangers? It is as if Sarah says, "Scared? Because someone is hurt? Yes, but mostly because that someone is my teacher! This shouldn't happen, not to my teacher. It makes me afraid."

Perhaps this brief incident tells us a great deal about the implicit trust children place in their teachers. It highlights the significance children place in their teachers: they are adults and, therefore, in and of a world different from that of children, a world into which the children are yet to be initiated. Teachers are knowing, perhaps all knowing, and because of this are not expected to have serious difficulties. It is as if the child says: "If you are all knowing, you should know how not to get hurt. If you do get hurt, does that mean that you do not know as much as I think you know? If teachers do not know, how can I?" Is it surprising then that a child could be alarmed when a teacher is hurt? The relationship has suddenly become distorted: the adult--my teacher--is vulnerable. Am I not at even greater risk?

By elaborating on one possible interpretation of this example, the identification and uncovering of discernible moments may have become clearer. Specified as it is here, the analysis of the possible meaning of Sarah's comments takes on a step-by-step quality, a certain ponderance that is not necessarily characteristic of other situations or other discernments. The interpretation presented here is only one example of a process arising from a moment recognized as having some differential quality that leads to a particular, detailed analysis. In its way, it enhances our understanding of the pedagogical relationship between teacher and child.

From Sarah's example, it can be seen that the interpretation of the discernible moment has an inner logic, a harmony that makes it greater than any of its separate nuances. It is an interpretation that does not seek to reduce the event to its core but rather to extend its meaning from a single context to much broader ones. Within the discernible moment are signs that come to us not only perceptually but, as St. Augustine wrote, that cause something else to come into thought as a consequence. These are not thoughts that spin down and disappear into the event but thoughts that spin out in magnificent possibilities of reaffirmed or newly discovered understandings. Such is the power of discernible moments within captured events. They are like a beacon that lights what human existence is about and, in that light, shows us wisdom and compassion.

While much can be drawn from analyzing a brief action or momentary dialogue (such as the boy's swinging feet or Sarah's apprehension about her teacher's minor injury), the value of using the concept of discernible moments readily extends to the analysis of lengthier experiences. "Reading: A Shared Semiotic Experience" (infra:573) is an example of how a sequence of interaction between teacher and children can be interpreted. It illustrates an interpretation that attempts to reveal more critically the pedagogical meaning that is created, sustained, or modified between teacher and children.

The concept of a semiotically based discernible moment has proven to be a critical one in interpreting the semiotic relationship between teacher and children. It leads to the identification of a significant sign within the lived experience (either as language, action, or attitude) that focuses our attention on a richness of meaning that might otherwise be overlooked. It is the sign that makes us pause a moment to consider what is embedded in the flux of human experience. The discernible moment is a sign within a sign that marks some signification, some potent meaning. In exploring the designatum of that sign, layers of meaning come to light, each illuminating further our understanding and appreciation of the complexity and value of human communication; each illuminating what it means to be a semiotic being and how the pedagogical relationship between teacher and child evolves and sustains itself.

In conclusion, the concept of discernible moments forms the basis of my interpretation of the experiences I observed in elementary classrooms. It allows me to find and to analyze significant episodes, to consolidate themes, and to look behind the obvious for the implicit meanings inherent in the pedagogical relationships between teacher and children. Because I derive my interpretation of discernible moments from their semiotic nature, there is an integral compatibility between the content of my study (the semiotics of pedagogy) and the research paradigm I chose to use.

The explication of discernible moments given here is intended to illustrate how I evolved the interpretations for the spatial semiotics of the classroom, the semiotics of interpersonal relationships between teacher and children, and the semiotics of specific pedagogical experiences as described in the following sections. The sign of the discernible moment is my invitation to explore; the signs within the discernible moment give me a rich bed of meaning from which to draw new insights about the pedagogical process.

II. THE SIGN: THE SEMIOTICS OF THE ELEMENTARY CLASSROOM

> We [as observers] have to concentrate on the influence of the environment upon the receptors of living systems in order to investigate their sign processes.
>
> ...[We have] to observe what is going on with the signs that are received by different subjects in different relationships, and how the objects that are signified by these signs appear.
>
> (Uexkull 1984:189,194)

Peirce's definition of sign is quoted in the vast majority of articles on semiotics and forms the basis of divergent applications of his pioneering insights into a theory of signs.

> A sign is something which stands for something to somebody in some respect or capacity.

In more than a play on words, Uexkull (ibid.) stresses that the interrelationships that simultaneously exist between the sign, the object or signified, and the interpreter in the creation of meaning are only possible if the interpreter is open to that sign, in the sense of understanding it and responding to it. He states that this concept is better conveyed by reversing Peirce's definition to say:

A sign stands to something for somebody. (ibid.:192)

The sign stands to something in the objective and imaginative world, "the place of invention" (Preziosi 1982:424) only insofar as it is meaning for someone. As Uexkull emphasizes, objects of the world (signs) remain "neutral" until transformed into meaning-carriers because of a relationship with a subject.

> Signs are in reality magic formulas whose creative power changes our world and ourselves.
> ....
>
> The exploration of this semiotic network of life is the key....
>
> (Uexkull 1984:194)

The way in which the signs of the classroom convey meaning for the teacher and the children is explored in this study within three main areas: spatial, relational, and pedagogical. In discussion of the symbolic nature of human activity, frequent reference is made to dramaturgy, particularly to the work of Victor Turner (1974,1979,1982). The discussion of the spatial semiotics of the classroom may be interpreted as setting the stage upon which pedagogy is created. Environment--what it is and how it gives meaning (life)--is recognized as being critically important in nature. Phytosemiotics and zoosemiotics are predicated on how the system-needs of plants and animals are met through the world in which they live. (Uexkull 1984:191).

Yet, in dealing with anthroposemiotics, a more mechanistic interpretation predominates. How human communication answers fundamental needs of human beings is most frequently described in terms of dichotomies. Preziosi (1982:421) refers to a long theoretical sojourn in the "logocentric labyrinth" in which emphasis is placed on

> ....the variants of the dyadic geometry of idealized speech act--encoder/decoder, sender/receiver, speaker/hearer, and, by analogy, use/maker...

He maintains that our "reckoning with the world", as an interactive response to our environment, must be included in any semiotic analysis. He contrasts the object-permanency of environment with the ephemerality of speech and maintains that

> The built environment is a dynamic component in complex discursive chains of signification ...The artifactual world may be said to be a necessary extension of our brains, comprising those portions of perceptual and cognitive cycles external to our bodies. Indeed, the webs of visual articulations into which we have been building ourselves antedate the technical appearance of Homo sapiens by a considerable length of time.
>
> (ibid.:423)

On this basis, spatial semiotics of the classroom is considered to be an important factor in the potential resonance of meaning that sustains the interactive relationship of teacher and children. The classroom, as "stage", is not a static entity but takes and gives its meaning because of the ways in which people use, change, and recreate that space. It is a stage on which the scenery and props are moved about to meet the needs of those within. Its physicality is a necessary environment in which pedagogy occurs, but that physicality is also an integral part of the semiotics of human relationships.

Within that stage, within that classroom, teacher and children are considered to be players. How they relate to one another and how they give meaning to each other is discussed in the "Semiotics of Interpersonal Relationships". In some ways, their relationships parallel a scripted play. There are expectations placed before them: the goals and objectives of education in general and for their grade level in particular; the organization of time and activities to meet these pedagogical intentions; the code of behavior that is implicit in being "present" in a school and in a particular classroom; and the traditionally accepted delimitation of authority, responsibility, and freedom as it is to be enacted by the teacher and by the student members as a "class". They are involved in ways of communicating with one another that are predicated on a common language and a broad common understanding of the context in which that communicative exchange occurs. It is a language of words and actions, of mental and body manifestions with the intent (explicit and implicit) of conveying meaning.

In other ways, teacher and children are players engaged in a creative play, an improvisation. In many ways, they must be. Each teacher is different, bringing different interests, talents, attitudes, and behaviors to teaching. Each child is different in personality, habits, attitudes, behavior, expectations, and intentions. The interaction between each teacher and each child, and between each teacher and her class, is as varied as an infinite kaleidoscope, not in the sense of symmetrical patterns of behavior but in the original meaning of the word--from the Greek: kalos-beautiful and eidos-form and scope-skopeein to watch, a swiftly changing and intricate pattern. The pattern of pedagogical relationships between the players comes from the requirements of their respective roles; the intricate variations come from the individuality of unique human beings. In its finest moments, it is a relationship that can be beautiful despite, and because of, rapidly changing contingencies in their personal and pedagogical lives.

Teacher and children, as players, are also signs to one another. They too "stand to something for somebody". They represent not only themselves but also broader significations of power, creativity, achievement, compatibility, and intentionality. They too are meaning-carriers as they move in and out of relationships that are necessary, desirable, and inevitable as they follow the commitment of pedagogy through time.

Just as the classroom is "the stage", and the teacher and students are "the players", the act of pedagogy may be considered "the play". It is in the process and experience of teaching-and-learning that all the elements come to fruition. It is here that intentionality becomes its own particular kind of reality--fully accomplished, partially achieved, tentatively sampled, or inadvertently diverted. "The Semiotics of Specific Pedagogy" portrays what can and does occur in the classroom. It describes the successes and the frustrations of the pedagogical act, the endless attempt to "take","give", and "bring" meaning to the search for knowledge and self-understanding.

"The Sign", as it designates this section, is the life of the classroom as it is shared by the teacher and the children in a particular setting and with particular intents. It is the source of all subsequent interpretations of the pedagogical process. It "stands to" that part of human activity regarded as "education". It is the foundation of experience that, for our understanding, presents itself to us. If we regard it as commonplace, self-evident, and unimportant, the "sign" of the life of the classroom becomes a neutral object, without meaning, complacent, and narrowly self-perpetuating. If, on the other hand, we regard what occurs in our classrooms as meaningful, then an exploration of its intricacies can lead to a more acute understanding of where pedagogical success lies and how we might more consistently and with greater creativity seek out such success.

Spatial Semiotics of the Classroom

The space in which people live, work, play, and learn is an important component of the influences that shapes the attitudes and behaviors they exhibit to others. The influence of architectural context is most readily recognized in the building of churches, civic centers, business establishments, theatres, and schools. Considerable thought is given to the choice of design, materials, and construction of these buildings.

In school building, despite innovations in design, technology, and the sophisticated play of shape, color, and texture, the elementary classroom remains a large space (frequently a rectangle) with variations in the placement of doors, dividers, windows, and shelves. This is true whether it is a self-contained or an open-area classroom. A room, by definition, is an extent of space used for some implied or specified purpose. A classroom then is the space in which classes are held for the implied and specified purpose of sustaining a pedagogical relationship between teacher and those who come to learn.

If the teacher has a home in the world, it is in the classroom. Within this space, the teacher creates a learning environment that humanizes the solidity of construction, making it a place that welcomes children and provides a backdrop against which their learning activities can be conducted in comfort and with convenience. Containing different books and resources, occupied by different teachers and different children, a classroom is always one thing: the most pervasive socialization environment available. It is both a spatial and pedagogical semiotic environment in which learning is expected to occur and where it does occur.

A classroom, as it belongs to one teacher--created by that teacher--is many things, changing with time, place, and circumstance. It means ever-changing combinations of desks, blackboards, learning resources, planbooks, attendance and achievement records, reading tables, shelves, art supplies, nooks and crannies for special collections of books, artifacts, children's work, and traces of teacher's continuing presence (a red marking pencil, an answer sheet, a pile of xeroxed exercises, an elastic-bound nest of report cards, a phys.ed. whistle, and a box of Kleenex). It is a complex of rituals and disciplines that blend the teacher and the children in a team (enthusiastic, indifferent, or recalcitrant) into one dialectical cluster of human beings using language and intelligence to search for knowledge and self-understanding.

In this sense, there have always been classrooms from the most ancient times to the present. Whether under a tree, in the piazza, in the computer room, or in the traditional classroom, the presence of one who teaches and one or more who are there to learn signifies a pedagogical setting. In this sense too, there will always be classrooms, spaces for learning wherever what is known is to be shared and what is not yet known is to be explored. The classroom is the epitome of society's attempt to nurture itself--to nurture from the emerging intelligence of the child or from the one who does not yet know, the ability to continue that evolution so that each boundary can be extended, each bit of knowledge may be cumulative, each advancement a new frontier leading to further discovery in an ever-changing but unending spiral of intellectual growth.

The space in which this learning is created becomes a classroom. Conventionally, it is a room within the building called the school. It may be a self-contained, independently created environment or it may be an open-area shared by many groups of children and formed and reformed by frequently changing arrangements of furniture, resources, and children. It may be a room rimmed with computers, art easels, or music stands. It may be an empty space that takes its character from what occurs there, e.g., the rehearsal for a skit, remedial instruction, independent project work, or display creation. It is a space that holds, that creates the boundaries for learning. It defines that learning as much as the learning defines that space. It is a semiotic space, a space that is simultaneously a message and a place in which messages are created. It is a space that, by its very character, invites certain activities, promotes certain behaviors, and allows certain flexibility or inhibits it.

The classroom (in whatever space) is only an empty room until one or more people become involved in a pedagogical experience there. When I ask Marnie to tell me what her classroom is like, she describes it only in its physical sense:

> Well, there are two chalk boards and one of them is longer. And they're on different walls. The desks are facing the small wall... And there is a counter at the back. There are cubbyholes there too. They're for putting your things in if there is no room in your desk.

Traditionally, that space is within a school, within an area defined by a number on the door, a label of its specific function, the teacher's name, or all of these. These signs point to what is likely to occur there. They are indices of an identity and an expectation, both for those who live within and to those who pass by. For some, these signs may be read as a reminder that the classroom space is different. It is different from the hallways, the foyer, the restrooms, the auditorium, the music room, the offices, or the storage rooms. They too are defined by their architectural semiotics but have a social, administrative, or supportive role. The classroom is unique, a space dedicated to pedagogy in its most direct and intimate form.

Interestingly, children appear to take the classroom very much for granted. As later discussion will show, their attention is primarily centred on their own desk. For them, other areas of the room take on discrete identities only as the teacher incorporates furniture, learning resources, teaching aids, and personal and personalized objects into a specific learning environment, e.g., the reading corner, the social studies display area, or the math study centre. While the child's desk is seen as his, not surprisingly the rest of the classroom is seen as a communal space, a space that everyone shares, and a space that is largely proportioned and distributed, restricted, or made available for the children's use by the teacher's edict. The children's acceptance of this order of things suggests that they implicitly realize that they have no authority in the creation of the space of the classroom unless their teacher allows this to occur. That some teachers do is as much a tribute to their insight into the child's world as it is a reflection of their sensitivity to the use of space for purely academic purposes.

In considering how a child perceives the classroom, Marie, a grade four girl, gives us a very typical and revealing answer:

> [We use the word "classroom" a lot when we talk about school. What do we mean by a "classroom"?]
>
> > It's something you are taught in. It's a room and you sit in your desk and you get taught.

[Can you have a classroom that is not in a school?]

> Well, it could be a portable. I eat lunch there.

[Do you think it would make any difference whether you were in the main school, or in the portable?]

> No, because the announcements go into the portable.

Notice that it doesn't really matter whether the classroom is within the main building or in a portable. As far as Marie is concerned, the portable is perfectly acceptable because announcements go there. The importance of communication with the rest of the school is obvious here. The corollary: a portable without the technological hookup that allows such communication would not be as acceptable. Somewhat obliquely, in these few words, Marie underlines the sense of belongingness that goes into making a "school". You must in some way be part of it, not necessarily in a physical sense but within reach of the sound of the "voice of the school". Perhaps this too is the key for the success of outreach classes, schools via radio, school broadcasts, correspondence schools, lending libraries, and computer modems. While some physical connection is necessary, it is not the mechanism but the human spirit conveyed through it that is critical. In the same way, life in the portable is acceptable (for some, even preferable because of its privacy) as long as a sense of belonging is maintained.

This sense of belonging is critical to the well-being of the children in the classroom. While (as will be elaborated at length in other sections) the relational and pedagogical aspect of the teacher-children interaction is primary in achieving successful intellectual growth for the children, the environment in which this occurs plays no small part in influencing this success. Consequently, the following section considers the semiotic importance of classroom decor (wall decorations, displays, charts, and objects commonly found in the typical elementary classroom.) Symbolic interpretations, extrapolated from the teacher's and children's comments, provide us with an insight into the significance of the total classroom environment as a semiotic space.

The reasons for creating an attractive environment are multiple. Colors, spaces, objects, and arrangements are all semiotic in the sense that they are signs, a kind of code that is selected to encourage interest, curiosity, specialness, belongingness, and community. It is a task that the teacher undertakes with seriousness as part of her pedagogical repertoire in creating a place in which learning will occur.

The classroom is a space within the school that must be enhanced in various tangible ways to meet the interests and needs of the children who will live there for ten months out of every year. It will be their homeroom, their home in the school, their educational residence. As "home" is described in the dictionary, the classroom may be considered to be their "home". It is simultaneously their place of residence during their formative years, a place dear because of personal relationships or feelings of comfort and security, a shelter, haven, and resting place. It will be their homebase, both a point of departure and a point of destination as they move to other classes and other activities. But it will also be their homeplate, as in some games, a goal or base to be reached in order to win or score. Since, for example, the grade four homeroom is symbolic of the grade four curriculum, the goal for everyone in that classroom is the completion of those goals and objectives. They must "win" before they are permitted to go on.

In many ways, it is also their homeland for that school term their place of allegiance and identity. It is where they "belong", where their friendships are sustained or grow anew. It is their space within the geographical world of the school but more importantly it is their place of origin and affiliation. The children are not in any classroom; they are in this grade four classroom. To complete the play on words, throughout the year, they will be given variations of homework, school work to be done or completed in their own homes, as a link between the intentions and expectations of their teacher and that of their parents or guardians.

Finally, one can hope that they will successfully "come in on the homestretch"--that they will complete an education that is deemed to be more than what might have been accomplished without the school as a social medium of learning. Ultimately, what the child learns at home is stretched to include what the community as a whole and his society in particular has to offer him as he grows and matures.

How the classroom becomes a home, a living space for the children and the teacher, is described in the following section. It must, however, be considered a space in which personal and pedagogical relations between the children and their teacher evolve. The space, in and of itself, is only a space. What makes it a classroom is very complex and not a little mysterious.

Esslin (1983:2) points out that before we can interpret, read, and understand signs, we have to have signposts and that our attention must first be drawn to the place where signs are being offered for display.

> Before you can communicate, you have to... establish the fact that communication is being offered.

A preview is in order: In an attempt to understand, at least part, of the mystery of an elementary classroom, the following section discusses the signs that give classroom space its meaning, how the classroom becomes and is a semiotic space. It is seen simultaneously as a space that takes its definition from what occurs in it, and a space that gives meaning because of its particular physical characteristics. Space, in its visual dimension, is a signifier, a conveyor of meaning.

Included in the spatial semiotics of the classroom are many of the things we take for granted as part of the classroom environment: the classroom walls, the desks, the things about the room. We expect them to be there. We use them without much thought beyond the convenience or expediency they offer us in the process of instructing children. Yet they are semiotic. They carry a code that is implicitly understood by the teacher and the children. They invite or demand particular kinds of behavior and motivate a particular vocabulary. They form and are part of the rules and routines that the class as a whole must respect. Their use or the transgression of their use provokes specific recognition or censure.

The spatial semiotics of the classroom then is an area of meaning that, if it is more clearly understood, gives us a way to enhance and to appreciate, at least in part, the complexity of meaning that a child experiences the moment he steps into the school. As much as "To everything there is a season", to everything there is a place. For every place the child experiences within the school, there is an attendant meaning. It is meaning both traditional as part of the school lore and as part of the synchronacy of reactions and attitudes as they are created by the child, his peers, the teacher, and by the interrelationships of the class as a whole.

Since so much of the children's education occurs in the classroom, it may be seen as a stage--the place of enactment.

> The stage is a place on which nothing happens that does not have a meaning in the framework of an action that is being exhibited. Anything that happens on a stage has meaning. And so, in a way, the theatre itself is an engine, a mechanism for the production of meaning--a sign-producing engine.
>
> (Esslin: 1983:1-2)

The classroom too is a sign-producer and, although pedagogy is not as tightly scripted as a play, it is ever-saturated with meaning.

The Semiotic "Weight" Given to Classroom Decor

Classroom Walls as Semiotic Spaces

To continue within the broad context of a classroom as "stage", what might be called "classroom decor" is considered by many teachers to be an important component of the pedagogical setting. Instructional displays and elaborate decorations are frequently created by the teacher in an attempt to enhance the learning environment. More importantly, these enhancements are seen as giving an identity, a sense of "ourness", to the room. It is apparent, particularly in elementary schools, that most teachers spend considerable time and effort (and no small personal expense) in creating a pleasant and informative environment within their classrooms.

Given the physical opportunities or limitations provided by the space itself, the walls of the classroom assume particular importance. An empty classroom usually presents areas of blankness: walls and blackboard and windows. Part of a teacher's attempt to cover these walls with meaningful displays comes from an inherent sense of breaking the sterility of the surrounding space.

During an interview after school in mid-September, Mrs. Wayne, the grade four teacher, explains why and how she makes her room attractive.

> First of all, I make sure I come in before the first day, so there is something up on the wall. Just because otherwise the room is "cold". If I walk into an empty classroom, it's nothing.
>
> I try to decorate the room as color-coordinated as I can. I would like to go pinks and blues because they are calmer, cooler colors. But the carpet will always throw me off. Last year it was orange.

[Your aesthetic sense is going through.]

> I think for the kids too, though, the whole feeling is different. Colors are very important to me and I just assume they are for the kids too. When we do things like our mind-calming exercises, that is all based on a lot of colors too. But here, I'm stuck with a "warm" classroom. Too "warm", too bright maybe. I made up an alphabet on blue, but I didn't like it. I made another one on orange to match the rug and I put the Flag Pledge on that soft yellow because it fits in.
>
> Then, with the Special Books by Special People, I wanted that display up because I was going to start creative writing fairly early and I wanted the class to see that. It's always neat for the kids to see some work by other kids that they know who are older. So that is up there. I covered the file boxes orange too. Again, I put up a bright orange title so it all blends in.
>
> {laughs} Maybe I'm too fussy! But I feel better if things are a little bit organized. Color is something that organizes things for me. I just assume that the kids like it too. But I don't really know if it makes any difference to them or not.

[How about the content of what you put up? Is that important?]

> Oh yes. The Math Blast Off! display you see up there in the front corner is to get them to think, to remind them that math skills are important. They ask, "What is that up there for? When are we going to get to the stars?" So when I started "Blast Off!" last week, they were all excited. "Now we know what that's for!" It's a kind of motivator, an interest display. Professor Q went up yesterday when I introduced him from their math-texts.
>
> I put the Indian display up to get them focusing in for the beginning of our social studies unit. It gives them one step up. It's up there. "Gee, I knew we were going to do that in social studies!"
>
> I put up the "Reading Takes You Places" with The Secret of Nimh pictures because a lot of kids saw the story on television during the summer. So I thought, they will have the images in their minds. The point I want to make with them is that from hearing stories you can develop a whole movie-picture in your mind. These pictures are a little "crutch" to begin with. But a lot of the pictures in their mind will have been influenced by what they see in movies or on television. I'll be able to move off into other stories that they haven't seen on television, ones where they will imagine for themselves.

At this particular point, it is appropriate to interrupt the teacher's conversation with comments from Danny spoken the following January:

> [When I look around the room, I see a lot of things displayed. Do you play much attention to those?]
>
> > Danny: Not really. Some of them....I like looking at the pictures. Like...reading The Lion, the Witch and the Wardrobe, it was nice looking at the pictures because ...they're in the story. You could follow. If we were reading another story...I still like to look at them because it is out of the same novels. [series]

[But now your teacher is reading one about the Arctic. What are you looking at when you are listening?]

I am just listening.

[Does looking at pictures interfere with your listening?]

Not really.

From his comments, Danny appreciates the pictures whether or not they complement the story being read. If they do, he has before him images of the characters and setting that he "carries" with him as new adventures evolve. If they do not, they appear to function as an inobtrusive focus for him as he listens to new stories. In a sense, it seems that while his body is seated in the listening circle, his eyes are involved in related or unrelated static visual imagery with no significant loss in attentiveness to the story being read.

This complex interlinking or refocusing of relevant and extraneous semiotic input is an ability common to human beings but is perhaps particular refined in generations of children who have television, video recorders, and computers so much a part of their daily lives. This is not to suggest that their concentration is continuous to the task at hand but that the shifting of awareness occurs with little apparent jeopardy. Where the boundary lies (for significant pedagogical growth) between full concentration and this more informal, transitory attention cannot be determined.

But Danny's comments suggest that there is more to be gained by a teacher's accepting this variation than demanding undivided attention. The teacher who decorates the classroom with attractive and appealing displays should be aware that their semiotic magnetism will draw the child not only because of their relevance to the subject but because of their visual and imaginative power.

But illustrations used as classroom displays or as artistic extensions of the books read by or to children can be used for more than visual entertainment. As Mrs. Wayne explains, they can be used for critical comparison as well:

> An interesting thing happened the other day. I was reading from the original hardcover book and one of the boys got a different edition from the library. He said, "Your pictures don't look like the ones in _this_ book." I told him that different people "see" things differently as stories are read or told. The illustrators obviously did. And so can we.

As valuable as teachers may consider the use of walls as semiotic spaces, the children appear to exemplify a full range of reaction and interest to such displays. Four children suggest that personal attention varies or is focused selectively on appealing displays. Marnie begins, with her comments (as others' are) taken from informal interviews in May:

[What kind of decorations are there in your room?]

> Marnie: Posters and things we make. There are some with puppy dogs on them and kittens and some with flowers.

[Why do you suppose your teacher and many other teachers put those things up?]

> To make the room look nice. And happy. And not down-and-sad.

[Do you ever read what's on the posters?]

> Sometimes.

[Do you remember what they say?]

> No.

[How about the one with the puppies? Do you know what that one is about?]

> No.

In comparison, Kathy tells a different story about the relevance of the wall displays. She represents children who may be more casual in their adherence to the teacher's instructions, who take more freely the opportunity for a visual exploration of their classroom, or who derive greater satisfaction from such activity.

[Can you remember any of the posters in your room?]

> Kathy: Yeah, there is one with flowers on it and it says, "Only feelings can understand feelings." I think that's what it says. And then there's another one that says, "It's nice to be just the way you are." And there's a couple of others. I can remember what the pictures are but I can't remember what they say. I don't really read them.

[Tell me about the pictures.]

> There's one picture of the sea, I think. And...there's one at the front of the room, (Well, what used to be the front of the room)...that has two dogs on it. Oh! There's a picture with a rubic's cube on it except it has trees and ducks on it and stuff. Those new ones. It's under the "Library Doghouse" [a poster reminder].

[You remembered the one about the feelings and the one about "It's nice to be known just as you are." Why do those stick in your head?]

> Well, I like reading them a lot. Some of them I just think about and really feel like them. I like to read things that make me happy.

[Do you read them often?]

> Yeah, whenever I gaze over there, my eye catches them and I read them.

[Doesn't that distract you from what is going on in the class?]

> No.

***

[What do you like best when you look around the walls here? What part of the walls or what things on the walls ?]

> Lisa: Mm?...There's mostly things about nature and I like nature.

[Without turning around, can you tell me about any posters on the back wall?]

> There are two kittens standing on the fence.

[Do you know the message on that one?]

> I don't know all of it. It says, sort of : I like you just the way you are.

[Good! "It's nice to be just the way you are." Can you remember any other ones?]

> No.

> [Why do you remember that one?]
>
> > Because I always look at it because I think the kittens are cute.

In comparison, the display of the children's own work is not always seen as desirable. Some children are uncomfortable by the comparison that is inevitable. In some cases, they may be quite ambivalent--caught between the wish to have their work displayed and the chagrin they may feel in realizing their work is of a lesser quality than that of others. The traditional practice of displaying quantities of children's work on the walls of the classroom and in the corridors of the school is obviously met with mixed feelings. In Roxanne's conversation, we hear her pride and her vulnerability:

> [I see some of your work up there. How do you feel when you see it there?]
>
> > Roxanne: Good and kind of proud because I did stuff the way I was supposed to do it.
>
> [Is that a sign that "This is okay!"?...I see one piece of yours, with your name and then a mirror-image. It is a very interesting design. Is there anything else that is yours?]
>
> > There's my Happy Face. You've got to read a book and tell the beginning, middle, and end. Then Mrs. Wayne will check it and give you a green, orange, or red Happy Face. Green is easy. Orange is medium, and red is difficult.
>
> [Oh, I didn't know there was a code in there, but now that I know, I can read it better, can't I? Which one is yours?]
>
> > You see the second row? Mine is the fifth one. A red one. That's for a hard book.

[Do you have anything else up?]

> Hm? (looks around) No.

[Suppose something went up and it was not your best work, how would you feel?]

> Kind of...like embarrassed. It might be messy or something.

[Why would that matter?]

> Because people would tell you that it's ugly and they might laugh at you.

[So when everybody looks at it, is it important to do your best? Are you saying that people judge your work when it's up? That they compare?]

> Yeah! Especially the boys! To see whose is best!

[Whose work is the best?]

> They say the boys. We say the girls! {laughs}

[There is no final answer then?...But, do you say the work is the best because it is a girl's, or because it is really the best?]

> Because it is the best. The boys are kind of messy because they like to draw boxes and that and girls like to draw flowers. Sometimes in art, you have to draw flowers and the boys don't like that, so they just do it any way. But the boys are better because they know how to draw.

[In your art, do you usually have to draw the things that the girls like to draw best?]

> No, things the boys like some things best. The girls like the art the boys are supposed to do.

[So the teacher mixes it up to make everybody happy?]

> Yeah. But everybody has to do what the teacher say.

Marie echoes Roxanne's pride in work well done and her excitement about taking school work home to show her family.

[Do you like to see your work up?]

> Marie: Yeah! But I haven't got any up now. I took mine home. My brother is going to Nova Scotia and I wanted him to take it to my gramma!

What else can a child give to those who care except the work of her hands as she accomplishes this in school? What has happened in her mind cannot to be shared in the same way. For that to happen, others would have to invite her commentary on her school day and listen without interruption while she formulated her thoughts and consolidated all that had occurred that had had meaning for her. Rarely does the child have such an invitation. Rarely does she have the experience of recreating what occurred in the classroom. To take home a poem, a social studies report, a drawing, a math test is much easier. These are immediately a sign, a completion, an achievement. Roxanne, in another conversation says, "To show them I could do a lot of stuff." For many children, school work finds its place on the fridge door, on the kitchen bulletin board, on the wall of their doctor's office, or on the top of Gramma's television set along with family portraits. A child's gift, taken from the classroom wall, carries its sign of accomplishment into another's space--to be shown, to be semiotic.

But even Marie, who treasures her work, implies that it may be not necessary to place it, or anything else, on the walls of the classroom. In this, she completes the full spectrum of children's reactions to classroom decor.

> [There are so many interesting things on the walls here. Does it matter to you if the room is decorated? Suppose the walls were all blank. Would that make any difference to you?
>
> Marie: No. It would be okay.

How can this be? Having come this far with the understanding that walls have a strong semiotic role in the classroom, Marie stops us. Blank walls could be just walls. There is, in this, a new note that leads us to look at walls again. Often what we see is no longer the wall but a sign-saturated collage, everywhere. There is no space unadorned, no reprise from the semiotic avalanche. There is no pause, no thinking space. Everything demands.

I am reminded of a kindergarten room in a new school. At considerable cost, a series of mosiac murals were designed for the main entrance, for the approach to the auditorium, and for the kindergarten room. Here, there was a bright, colorful design of an elephant spraying water on his back, and a giraffe nibbling leaves off a tree that arched over the top of the entire wall. Visitors touring the school prior to its opening invariably exclaimed how attractive it was, how appropriate, how charming. What they did not see, but what became alarmingly evident when the teacher and the children moved in, was that there were no other wall spaces to display the children's work or anything else. There was only a wall of windows, a wall of blackboards, a wall with the door and children's coathooks. Within days, the teacher made her choice: the children's work would be placed over the mosiac. Though well-intended (as the mosaic had been), the end-result was a confused tangle of visual demands. Soon there was no space for peaceful contemplation of the mural itself or the differentiation of one set of children's work from another.

Perhaps Marie knows better than we do the need for the eye and the mind to rest, to have a place where one might look and have a conversation with oneself, to have a place that is not semiotically committed, a place that is open. Space invites the child to follow his own vista of thought. It does not stop him in the past, in work already done. Rather, space can lead him into the future, into his own thoughts and their infinite possibilities. Space can allow a child to explore rather than define, to change without losing, to create in multiple-dimensions, to play with ideas rather than to become encircled by their limitations, by what is already given by others.

As we listen to the children, it is so simply said: the important things for the children are those they can make their own, in a space where they can be and become. All the rest may not even matter. In this, there is a message for the teacher, particularly for the one who creates an exclusively teacher-made environment. No matter how pedagogicallly relevant such as environment is, no matter how aesthetically pleasing it may be, no matter how much time is required for its completion, such an environment implicitly belongs far more to the teacher than to the children. From their comments, it is evident that they need (in the sense of a basic self-identifying need) to see samples of their own accomplishments as an inherent part of the classroom environment. If the classroom is totally devoid of any semiotic evidence of their presence, then children may tacitly regard themselves as "visitors", courteously praising the talents and efforts of the teacher without any personal involvement or commitment. If the classroom is a semiotic environment in which children learn (and it is), then there must be traces of their living in that classroom and of their semiotic progress in learning.

It is tempting to suggest that children be given their own small space of wall and be invited to create their own message, their own display, a part of themselves within that space. Some might chose a single piece, placing it sensitively in the style of Ikebana in relation to the entire space. Others might thematically group personal possessions in a three-dimensional display. Others might create a sequence of work over time. Still others, a montage. But in this, there would be the opportunity to honour the wall space as a child's space rather than a teacher's space.

Ironically, teachers and administrators often judge a teacher's pedagogical success and the children's pedagogical progress by the decor of the classroom. They are impressed by a teacher's diligence in coordinating an attractive and artistic display. Where the work is only that of the teacher, they may be misled about the quality of children's involvement in the learning process. Paradoxically, the time and effort that a teacher may devote to creating such a display is better spent in guiding the children in the creation of their own displays and in their choosing, deciding, arguing, rearranging, and completing the project.

As much as there is the potential for pedagogical meaning in all classroom wall displays, one cannot help but wonder if (in some classrooms) two specific effects are not inadvertently created. These might help explain why children did not refer to the extensive wall and table displays created by the teacher for instructional purposes, such as a large table model of Fort Edmonton, nutrition and safety charts, instruction-charts for free time activities and assignment completion, book displays, and related objects, such as plastic whale models and a miniature lobster trap, or the beaver pelt on the wall (which did receive an occasional pat as they passed by).

First, when displays are mounted but remain indefinitely in position, is not the semiotic impact of their message dulled? What was once meaningful becomes neutralized by its very persistence. It is no longer seen, just as billboards around the city no longer attract attention, or as the decor of a home becomes so much a part of the space that it is submerged in the consciousness. Awareness only becomes active if some new or continuing reference is made to it. What is no longer relevant is no longer seen.

However, static displays can also create in the viewers' mind an attitude of indifference or withdrawal. The initial display may be read or experienced as mere tokism, a obligatory gesture devoid of any pedagogical meaning. But because it remains there unchanged, it serves as a reminder of the meagre quality of that gesture. "Teacher put up a few pictures." That's what teachers do. There are junior high and senior high school classrooms where this is glaringly evident. The room is devoid of identity. It is merely a space, any space.

While it is appreciated that these classrooms are used for various purposes, there is little to justify such an impersonal environment. While teachers might argue that they bring subject references and artifacts into the classroom with them, comments from high school students in particular suggest that this is more a rarity than a practice.

By extension, rooms where higher learning occurs take on their identity without any tangible semiotic use of space. Indeed, as more and more knowledge is of an abstract or technical nature, this may not be unexpected. However, one might question whether humans as visually-oriented beings do not at all levels need some graphic representations beyond verbal exchanges. It might be argued that this is particularly relevant at the elementary school level.

The second effect of static displays is the semiotic implication they carry: "This is all there is..." to represent a particular topic or concern. The very staticness suggests stringent boundaries on the breadth of knowledge to be discussed. Only this, and this, and this is important. Nothing more is needed. No, do not reach beyond. This attitude echoes implications of the narrowness of pedagogical scope discussed in "Lessons outside the Classroom". (infra.:217)

Children's work (particularly art, creative writing, and reports), pictures, charts, graphs, maps, collages, posters, lists, calendars, schedules, event announcements, record-keeping formats, cartoons, flow-charts, reminders, and inspirational mottos, all reinforce what the teacher is saying and extend the child's awareness of specific details related to the work being done in the classroom. That the walls present ample opportunity for semiotic display is self-evident. Walls become a montage of decorative and meaningful messages. Semiotic play in space--whimsical, serious, instructive, inspiration, reinforcing, recognizing, and reminding. Messages on classroom walls are inherently symbolic in that they move beyond these physical boundaries to open the world for the children. The displays may be seen as windows that provide vista beyond the limits of the classroom, whether into the mind of a child as expressed in her haiku (mounted and sensitively illustrated), into the charted macrocosmos of a germinating wheat kernel, or into the timeline of the movement of immigrants into Canada.

Where the work of creating displays is turned over to the children, the teacher's example and guidance plays an important part in the care and deliberation with which their efforts are made. The ability of children to express themselves in many formats can become an important dimension in their repertoire of semiotic variations. As they learn to appreciate and to design creatively their own presentation of information, they become more and more adept at appreciating and evaluating the multipicity of semiotic input in the world in which they live. This moves beyond visual literacy (as it is understood as the reading of visual signs) to a more sophisticated analysis of purpose, effect, power relations, and subconscious indoctrination.

Morris (1971:246) speaks emphatically on the need for training in the flexible use of signs and maintains that the process could and should begin with the youngest children.

> Insight into the nature of signs provides us with an instrument which improves our understanding of, and participation in, the whole of our contemporary intellectual, cultural, personal, and social problems.
>
> (ibid.:3)

The challenge for teachers who would have their classroom displays truly reflect their educational goals and objectives is to motivate the creation of frequently changing, relevant, and graphically attractive displays, whether these be on the walls, on countertops, in display cabinets, or in a "feely box". The sources are many, ranging from the local newspaper, national magazines, and local school board instructional-aid inventories, to the Educational Program of the National Museum of Man. All this implies a tremendous amount of time but the teacher has inquirying partners in this undertaking--children who would benefit most from an intimate involvement from the first stage to the last: from the initial location of information, materials, and objects, to deciding what should be displayed, determining how this might be done most creatively and most effectively, to the labelling and emphasis that enhance and strengthen the display.

Finally, an awareness of the vast potential of semiotics conveyed through the classroom environment in terms of artifacts, wall displays, display cabinets, model creation, and in the infinite variety of visual and graphic representations that can be made in the classroom, should lead the teacher to an exciting exploration that encourages rather than stifles inquiry, motivates further study rather than fosters attitudes of indifference or complacency, and offers rich opportunities for the children to explore and develop their own sense of visual and tactile manipulation of information.

***

The Children's View of Classroom Objects and Displays

Conversations with the grade four children reveal how much attention the children give to elements of classroom decor and what importance they give to the various objects commonly found in the classroom. In some cases, the conversations were spontaneous and unsolicited. In the situation described below, the discussion was deliberately structured to elicit specific opinions from the children.

The Choices Children Make Related to Classroom Objects

I am particularly interested in the priority that children assign to the various objects commonly found in the classroom. Cziksentimihalyi and Rochberg-Halton's study (1982) provides a valuable insight into what ordinary people keep and treasure in their homes as symbolic of their lives. What in the classroom is similarly treasured? To provoke a limitation and a decision from the children who had volunteered to talk to me "about school" during May of the school year, I used a specific question phrased in the following manner:

> [Let's pretend we have to move from this classroom immediately and we are allowed, by some strange rule, to take three items. What is in the room that you would take?]

> Don: Mm?...I'd take my mathbook. (Can I include that with a pencil?) Good. And I'd take...maybe my binder...and a scribbler.

[Why did you take those three things?]

> So I would have something to work in. {Laughs}

[All right. Now, I want you to decide what three things out of the whole room you would take. Not just your own things.]

> The dictionary...Mm...The small plants... [These have been grown and tended by the children for Mother's Day.]...Let's see?...I don't think I can think of another one.

Don is amused that he is dedicated to preserving his personal school supplies and continuing his "work" regardless of circumstances. His mathbook is the scribbler in which he does his calculations; his binder, where his social studies notes are written; his scribbler, where his spelling and language arts assignments are kept. These items may be interpreted as symbolic. They are witness to his efforts in this classroom, signs of his learning, his mastery of details, his creativity, or his astuteness. He might have chosen (but did not) his jacket, his sneakers, or the stereo headset that was in his desk. He did not chose these, either because he was answering a teacher's question or, in the hypothetical situation posed, he genuinely felt his choice was more appropriate. While he does ponder before answering, his satisfaction at including a pencil as a companion to his mathbook to be tallied as one item suggests that his decision centres around objects of academic significance rather than those of purely personal value. This is perhaps not in the least surprising, except to note that where an alternative choice is possible, he does not take it.

Asked the same first question, Marie gives a similar first choice but includes very personal items:

> Marie: My scribblers...because I can look at them when I am on holidays. My pencils. I can use them. And my pottery. I made a pot and a plaque. I can put earrings and that in it. My plant. The plant is for Mother's Day but she'll let me plant it.

In contrast, even when Don is deliberately drawn away from his personal emphasis, he chooses not "my plant" as Marie does but "the small plants", emblematic of careful and diligent nurturing from seedlings to maturing plants by the children of the class. His response suggests that the reward of a rather lengthy learning and caring process deserves safekeeping; as does the classroom dictionary. Other than the dictionary (itself highly symbolic as a preservation of what we know about our world), Don cannot think of any other item that merits the taking. It is interesting to speculate that if an encyclopaedia had been stored in the classroom, he might have chosen it in place of the dictionary. What is particularly impressive, however, is the immediacy of his answer "the dictionary" as it is heard again on the tape of the interview. This is a sign that, for Don, there is no question that the book of words is important. While he does not speak from an awareness of Heidegger's analysis of Trakl's poems (1959,1971:140), he does (by my extension of meaning) imply that "Where word breaks off no thing may be." Of all the things that he might have chosen, he chooses that which names our world. As Heidegger expresses it:

> ...names are necessary. They are words by which what already is and is believed to be is made so concrete and full of being that it henceforth shines and blooms and thus reigns as the beautiful everywhere in the land. The names are words that portray. They present what already is to representational thinking.
>
> The word makes the thing into a thing--it "bethings" the thing....the word does not give reasons for the thing. The word allows the thing to presence as thing.
>
> (ibid.:144,151)

If removed from the familiar classroom for reasons not given, what better single object to take than that which will allow entry into an essential understanding of language, thinking, and our world. But it is not without pleasure that I note Don takes the plants as his second and last choice. Plants, symbolic of nature in contrast to our abstractions, have a place in his world too.

Finally, while it may appear that Roxanne's hestitant response is a fully personalized list of things she would take from the classroom, there is in her choice an implicit suggestion that the items she selects have pedagogical value to her and her parents:

Roxanne: Hm?...I would take...hmm?...My picture from there [art work display]. I'd take my work home, and...one more?...my creative writing [kept in special folder]. I like to show my mom and dad that I could do well with lots of stuff.

What The Children Imagine a Teacher Values in the Classroom

[Now, I'd like to keep the same question, but change the person. What three things do you think Mrs. Wayne would take out?]

Don: Her answer book! Her math answer book...and...her language arts answer book... And...her language arts duotang.

[Why are those important?]

Because we are studying really hard in language arts...about volcanoes, so she would ...I _know_ she would take that. She would take her math answer book so she could mark things. And she will take her language arts for the same thing but marking our cards.

***

[Now, look around the room and what three things would your teacher want to take?]

Marie:....(long pause)....

[What's important to her?]

Her plants....Her scribblers, that she used to write in them for 1983-84; and...her cup that she uses for her coffee. {Laughs}

***

[What three things would your teacher take? We'll only allow her three things too.]

Roxanne: Oh, brother!...Hm?...I don't know....She'd take the stuffed animals. Maybe she might take her desk. (giggles) And all her paper and her work.

[Why would that be important?]

> I take it back. Maybe not the work!

[Why did you change your mind?]

> Because she would have to do the work....She could take...I don't know....It's hard to decide...

***

There are interesting observations to be made from the comments of these children. Don, for example, takes those items that would allow the teacher to continue her role in any other space: the answer books. These are seen as the final authority on whether the children's answers are right or wrong. He insists that the importance of these books would not be overlooked by the teacher. By inference, he trusts the answer books over the teacher herself and believes that without the books, the teacher would be lost. The books serve as tangible evidence that his education could continue. He may be reflecting the constancy with which the teacher refers to answer books. If so, Don, along with many other children, may be so conditioned to expecting books to answer all questions and serve as verifiers for information, that he does not credit the human mind (as represented in his teacher) as capable of creating and recreating information that is needed by others. If this is indeed so, there may be instilled in children an inadvertent and serious dependency on books as the final arbiter in our search for knowledge.

Further, Don refers to the language arts answer book. "I know she would take that." That particular book is a sign of intensive work on volcanoes, a topic that greatly appealed to the children, and one that had been integrated with their artwork and science construction projects. It could not be left behind for that would leave too much of themselves. In a similar vein, the answer books in math must be brought out of the room. Regardless of where the children are, they will need the teacher's verification: her marking, confirming, correcting, helping. It is as if Don fears they might become rudderless without this component of their education. For Don, Mrs. Wayne cannot stand alone. The accoutrements of pedagogy must accompany her.

Perhaps for the same reasons, Marie includes Mrs. Wayne's scribblers. Her teacher's records of their achievement must be treasured. Although Roxanne cites "all her paper and her work", she retracts it. She "frees" the teacher and perhaps herself. It is as if without the papers and "work", the teacher would not have to be a teacher and the children would not have to be pupils. If they leave the classroom, neither would to be obliged to continue the pedagogical relationship. But Roxanne equivocates: perhaps it would not be such a good idea after all.

Then, with some amusement at the improbability, she suggests that Mrs. Wayne would carry out her desk. The teacher's desk is to the teacher what the blackboard is to the classroom and, from what the children tell us, books are to children. In the eyes of the children, these are inseparable. There is a fine sense of propriety. No child suggests taking his desk, yet the teacher may. Given the significance that children indicate their desk have for them (as discussed later), it may be inferred that they sense that they do not have the authority, as the teacher does, to take such a major component from the classroom. Or, as Ricoeur (1978:24-28) describes the value of archival text, the children choose to take, in preference, their "written text", the tangible "sedimentation" of all their previous work and the formats in which future work could be preserved.

One cannot conclude this section without commenting on three last items included in the children's comments: the coffee cup, the plants, and the stuffed animals, for these too may be seen as highly symbolic choices. Marie, who thoroughout has been sensitively aware of her teacher's moods and needs, suggests that Mrs. Wayne's coffee cup must be taken. This personal item indicates a recognition of her teacher's personal needs aside from her professional duties, a hint that Marie understands that there is more to what a teacher might value than artifacts of schooling alone.

There is a semiotic aura, too, in Roxanne's first choice of what she perceives her teacher values most in the classroom; The stuffed animals who reside on the bookcase in the reading corner: E.T., Winnie the Pooh, White Rabbit, and other miscellanceous soft, cuddly animals, are not toys but friends, story characters, confidantes, "people". They cannot be left behind any more than the children can be. They are of their world and must go where the children go. Yet, because they are Mrs. Wayne's private property, it is she who must take them and not the children.

As Don has, Marie notes her teacher's affinity to plants and makes them her first choice. I am reminded of visiting a colleague's grade three classroom during the spring of 1983. The long countertops along the east windows were filled with enormous ceramic pots of gloriously blooming geraniums. One day, as I watched, a small child raised his hand and gently cupped the rich red cluster of blossoms. As much as this teacher nurtured her plants, she nurtured these children and led them to fulfillment. The same astute judgment she brought to the needs of the plants, she brought to the children, and more. To follow the analogy, she set their intellectual roots firmly into the ground of reading, arithmetic, printing and handwriting, spelling, speaking, and listening. She turned their minds to the light of inquiry through the science and social studies program. She taught her own art and music because she saw these as integral shoots on the main plant-of-learning and not as appendages fastened onto the main stem with florist wire. There were times when she pruned to ensure wholesome and sturdy growth, but there were no discipline strategies except those based on a profound respect for each child and, equally, for each child as a responsible member of the group. At her recent retirement tea, parents (once her pupils) and children (long gone from her classroom) returned to thank her for giving them the gift of herself--her patience, her insightfulness, and her pedagogical skills.

When we look back at the choices that the children made for themselves and for their teacher, it is evident that what is important in the classroom is singularly those things to which they have a strong relationship: their work, the plants they have raised, the artwork they have created, the posters that "speak" to them, and the objects they love. The implication for pedagogy is clear: the more links of meaning that can be established between what the child does in the classroom and the forms in which that learning is expressed, the stronger and surer the learning. A child's learning must, in some way, become "mine". The classroom (and all that is in it) must have meaning for the child, must become an integral part of his learning and his life, for these too are inseparable. This is not an abstract notion but one rooted in every gesture and every word. "What did I learn in school today?" Better that you should ask what I held in my hands, what I said, what I felt, and what I thought today. What didI move from the realm of neutrality into my world? Ask me what became "mine"? What did I wrap in language and ideas, and hold close to me? Close to my body and close to my mind? Then I can tell you what I learned and what I became in school today.

***

The Semiotic Significance of Children's Desks

> So much of a child's early life is spent on that two foot square of hardwood. I managed to salvage one of my own a few years ago and all its scratches and carvings and stains brought back a flood of memories.
>
> (Kurelek 1982:55)

The Child's Desk as a Personal Semiotic Focus

A classroom without desks would seem strange indeed. Yet there are classrooms that do not contain desks. We know these spaces as a studio, the music room, the gym, or the library. Conventionally, when we speak of classrooms we visualize some form of desk. "Desk", in this sense, means any space designated for an individual as a relatively permanent place for the purposes of having a study area. In the classroom, this might be at a traditional wooden and metal individual seating place, a given spot at a table around which a group of persons is assembled, or at a computer terminal.

From the Latin discus meaning table, desk refers to a table with compartments and drawers and adapted for a particular purpose, usually writing and reading. But it is also understood as a division or post in an organization: the service desk or copy desk. In discussing this obvious and taken-for-granted feature of an elementary classroom, it becomes apparent that "desk" is understood by the children as both a place of study and as a position within the classroom. It is also very apparent that the desk carries much greater semiotic weight for the child than is commonly appreciated.

Asking a child, "What space in the classroom is yours?" invariably brings the response, "My desk." Watching the instant tussle that results when one child moves towards another's desk with any sense of usurping it and actually sitting in it, only confirms the strength of their sense of ownership and proprietorship. The commonly-heard, "Sit in your own desk," as expressed by a child or a teacher reemphasizes the discreteness of freedom that exists in association with the desk. In many ways, the child's desk is semiotically strong, wrapped in meanings of possession, individual rights, privilege and denial, protocol, and privacy. When Jane is asked to describe her room--What do you remember most about your classroom?--she answers:

> Where I sit, and my friends.
>
> [Please describe where you sit.]
>
> I sit in the second row, the second person, closest to the door.

Jane has a definite sense of her geographic space within the classroom. The same sense is observed in kindergarten children. Asked where their place is in the room, they point exactly to their place and say, "Over there. That's my chair." Occasionally one will go over, sit down, and with a body wiggle announce, "Here. I sit here." or "This is my chair." Not surprisingly, the rest of the classroom is seen as a communal space, a space that everyone shares.

It is evident that a child attaches a great deal of meaning to the desk in which he sits. It is more than a physical object designed for his comfort. Whether the child chooses where he will sit or whether that decision is made by the teacher, the desk becomes his "home". In an interview in mid-September, Heidi tells of a rarity in her own school history. On the first day of school, she had waited with all the other children in the auditorium for her name to be called. Then she went in search of her classroom:

> I thought the other room was my teacher's room, but it wasn't. She said, "Go into the next class." So I went to the next class and I found my desk in the front. I decided to sit there so I would have a chance to sit in the front. In grade two and grade three, I never did sit in the front. And there was just one left too! I got it just in time! And Kathy was sitting here (beside me) and Tammy was on the other side! But she had to go to the split-class. Then Lindsey sat there.

"I found _my_ desk in the front." For some children, a front desk is a coveted position, probably associated with being nearer to the teacher for greater period of time, with the status of having a front desk, and with the practical purpose of seeing the blackboard more easily. Heidi marvels at her luck: having possession of a front desk, and being surrounded by her friends. At another time, Lindsey expressed her feelings about finding the right place to be in the classroom:

> [When your name was called and you were going to go to Mrs.Wayne's room, how did you decide where you were going to sit?]
>
> > Lindsey: Well, the good thing was that my best friend was in the room. And I thought, "Oh boy! Is this ever great!"
> >
> > Because I have _never_ been in her class before. We have known each other since playschool and I'd have somebody in the class that I _really knew_! I like sitting beside my friends because I _know_ them.
>
> [Why is it important to have somebody you _really know_?]
>
> > Well, if you don't have anybody you know... like if you're a new person in school, it's really scarey! Like when I was new at the other school, I was just...{Holds body tight} ...sit there, you know. You look at everybody around you, and everybody is talking to their best friends beside them, and you're sitting there in the middle of the room, just sort of looking around...not knowing what to do... If you have a friend, then you have somebody to talk to.
>
> [So even _one_ friend helps]
>
> > Hmm...

[So you and your best friend really wanted to sit together?]

> And we did! She sat in this row at first; I sat in that one. Then we got moved. But luckily, the teacher moved the boy behind me in front of me, so we were diagonal. Then she moved another person over beside me.

But as Lindsey continues, even gaining the desired desk position does not guarantee that all will run smoothly, although its rewards may outweigh the losses:

> These are really my best friends, because I had them beside me last year and they gave me a lot of trouble.

[How do you handle that situation?]

> Well, I just ignore them sometimes. But if they start pushing me and stuff, I just tell Mrs. Wayne. Like if they start poking me, I just ignore them. As long as I can. But then when I can't, I just raise my hand and tell the teacher. She makes them sit in the corner or go outside.

In this case, being dismissed from your desk is a penalty for misbehavior. The distance from the desk to the point of removal may be an indicator of the severity of the demeanor, such as being sent out into the hall or to the principal's office. In this light, remaining is your desk is seen as a privilege, earned by appropriate behavior and involving the granting of certain discrete advantages.

Three Semiotic Layers Associated with a Child's Desk

There are at least three ways in which the child's desk takes on semiotic meaning for him: in terms of a spatial-relational aspect--reflecting the child's physical place within the classroom; in terms of intellectual expectancy--as derived from "being at your desk" in anticipation of pedagogical interaction with the teacher, with other children, or with one's own thoughts; and finally, the affective impact of one's place in the classroom seating arrangement includes attitudes and feelings generated because of the spatial positioning of the child in relation to the teacher and to other children. These effects are intimately interrelated but for the purpose of looking more closely at the ramifications of where a child sits, each will be discussed separately.

Considering the spatial-relational aspect of a child's placement within the class--his desk is where his books and belongings are held, where his body rests, and the place from which he moves and to which he returns. Being "in your desk" is a sign that you are physically present and, in the fitness of things, you are in an appropriate physical relationship to the teacher and to your classmates. If you are not "in your desk", then why you are elsewhere may come into question. Some implicit authorization must permit you to be there. Equally, the overriding authority of the teacher and the tacit traditions of being in school will require you to return to your desk, to "take your place". Your place is your desk. For the child, the physical orientation of his placement is, as it were, his address.

But each child's desk becomes uniquely his epicentre within the classroom. The distance between his desk and the front of the room, the reading corner, the teacher's desk, or the door, marks his orientation and mobility pattern and take on meaning as it determines whether he will be first or last to arrive at a group, will answer the door or not, will assist the teacher or not, will be able to relate informally with his friends or will have to risk more conspicuous gestures to maintain his relationship with them. It determines whether he is usually within easy access of the teacher or far removed from her usual "station" of instruction. The grid that commonly marks the rows, i.e., five rows across the room and six desks down, is an administrative pattern. For the child, the pattern seems to be interpreted primarily as an orientation related to where friends are sitting. "My best friend sits kitty-corner from me." "My friend is way at the back." "It's neat because all my friends sit real close to me."

But, in a greater context, where a child sits may allow him greater or less access to what is deemed important in classroom life. The image of Rob, a tall, lean boy sitting in the back right desk, comes to mind. Is he quiet by nature or because he is sitting in the desk that is at the extremity of his teacher's vision? Did he chose to sit there or does his height automatically allot that position to him? What does it mean to him to be at the periphery of classroom life year after year? Any one explanation is, of course, more complex than suggesting here, but it is interesting to speculate on how much of a child's relationship to his peers, to his teacher, and ultimately to education stems from the position of the desk in which he sits?

In an intellectual sense, the child's desk is where the expectation of learning is centred. The desk brings with it a connotation of pedagogical receptiveness. By being in his desk, the child is indicating (at least in a public sense) that he is ready for learning. Unless sanctioned by the teacher, being "out of his desk" implies that that readiness is not given. Whether or not the out-of-deskness is legitimate or not, until the child is in his place there is the assumption that other tasks take priority. The closer these tasks relate to a pedagogical intent, the more likely the absence is permitted, as it is when children are working in a group at a table, going to the library for references, or doing an errand requested by the teacher. While being in the desk does not ensure an involvement with pedagogical activities, it is one of the externally visible ways in which the child can indicate to the teacher his willingness to learn.

As we have heard from the children earlier, the connotation of classroom carries the concept of the desks in which children are to be seated. The desk then takes on a semiotic significance for it is from this site that the children view their relationship with the teacher. This is revealing in its very simplicity. Just as the classroom holds the teacher and the children, desks hold the children. Desks anchor them, as it were, into a receiving, receptive position. The teacher's call, "In your desks, please." or "Go back to your desks, please." is rarely seriously questioned. But if it is, it can only be read as a gesture of defiance, a resistance to the teacher's intentions. In this case, not occupying the desks becomes a deliberate transgression, a sign that only takes its meaning from the very fact that the conventional place for the children is in their desks.

But there are many classroom activities where freedom to move about the classroom is assumed, often by the very nature of the activities. For example, during the art lesson in which the children are creating and sewing quilted wall hangings, there is a great deal of movement--trips to get needles and yarn, remnants of fabric or a pot of glue, to confer with friends about the effectiveness of a design, to ask the teacher for additional information, or to solicit praise for work already completed. The movement away from the desks was inherent in the nature of the learning. Similar flexibility is seen in social studies assignments, when desks are clustered into discussion centres or cleared aside to permit work on a mural. Or in language arts, when desks are moved to simulate a public forum on the issue of the commercial use of national parklands.

But the most important dimension of the intellectual expectancy associated with a child's desk returns to the traditional meaning of "being in your desk"--being there for the purpose of accomplishing a specific task as instructed by the teacher or as implied by the activities in the classroom. For the most part, this type of assignment is an individual undertaking. The desk, in this sense, separates the child from others in a way that is different from what occurs during a class discussion. Now the child's focus is to be on his own work, in his own sphere as defined by his desk. At this point, he must depend on his own capabilities, his own skills in completing the work, and his own judgments in framing answers. He no longer rides the wave of communication that moves from one child to another and to the teacher and back. Now he is alone with his thoughts and his own responsibilities. He will be judged, not as a group participant but as an independent performer.

If he is a capable student, he may delight in the opportunity. If he is less capable, he may be very reluctant even to assume his position in his desk for that implies a commitment, one he knows he cannot make easily. If his friends are diligently working, he may be similarly motivated. If they are not, he may take his cue from them. Faced with pedagogical assignments, he may see his desk as an entrapment, a place of implicit obligations. The semiotic traces he associates with his desk may have a great deal to do with how he performs in that desk. For now, he must face himself. As each child does, he knows the measure of his work. When we speak of the need for children to be successful, we do not normally think of an aura of that success being associated with their desks. But watching children move in and out of their desks with eagerness or reluctance, suggests that this may indeed be possible. In many ways, children live in their desks as a place of past success or failure and that may be enormously significant in forming their expectations of their own future.

As suggested earlier in Heidi's and Lindsey's comments, the desk also carries with it an affective dimension, particularly in the relationship to friends.

> [You were saying that you were diagonal from your friend. Is that close enough?]
>
> > Lindsey: Yeah. The person in front of me is one of my good friends, so we all chitter and chatter!
>
> [So there is a little triangle of friends there.]
>
> > Hmm. I can say "Nancy, pass me this..." and we can talk. Some times, when we can't talk, we write notes to each other.

In many classrooms, it is a common practice for a non-conforming child to be placed in a front desk or in a position close to where the teacher most frequently stands. The intent is to create the shortest possible distance between the child and the teacher. While this distance is a physical one, its more important implication arises from a proximity that allows the teacher to monitor, guide, and maintain a one-to-one relationship with the child. "I've moved her here so I can keep an eye on her." can mean a warm, supportive interaction as well as a disciplinary one.

The effect on the child is affective, as it is when a teacher moves a child away from friends or closer to them, or to a particular place where specific interactions might more easily occur, e.g., placing a non-English speaking child near one who is willing and able to assist in the learning process. While the intent may be educational, it is more. It is an attempt at establishing a needed relationship with the child and the teacher, or with the child and specific classmates. In this context, the desk becomes a place of belongingness: of all the places possible, here is where I belong. Here is where my total needs are met, where an aura of familiarity surrounds me, where someone is reaching out to me.

However, the reverse can also be true. Where a child is placed can carry a clear sense of being removed from the group, of being separated into a different physical space. But this too can be seen as having an affective impact. Setting the desk apart from the conventional arrangement may be a teacher's symbolic gesture, an attempt to accommodate a child's special needs, such as screening of a child from the distractions created by a more open view of the classroom. Desk allocation may be governed by a child's inability to refrain from bothering others or by a child's preference because of certain perceived advantages. For Danny, wherever his desk is within the classroom, it is his place of belonging, a personal harbour in a communal sea.

> Danny: No, I don't mind having my desk over by the bookcase. I like it there. It helps keep me out of trouble. Talking with my friends and things like that. Mrs. Wayne asked me once if I wanted to move back into a row, but I didn't want to. Besides I can stretch out more and lean on the bookcase when I'm listening to what's going on.

The disciplinary connotation associated with children being away from their desks is very clear. During an interview with Mrs. Wayne several months into the school term, the discussion had centred on the reaction of children when a teacher is called out of the classroom.

[What would you find when you came back?]

Mrs. Wayne: Chaos!

[That was quick!] {We both laugh}

> If I have my high-heels on or my heavy boots, I'd hear "Mrs. Wayne is coming! Mrs. Wayne is coming!" When I'd come in, there would be most of them working, but there would still be some who hadn't managed to get back to their desks before I walked in.
>
> If they are really getting out-of-hand, I could make them sit there and make them be quiet. But I wouldn't feel good about myself. I like the idea of having to use subtle power. And it just really bothers me that I would have to use power as an authoritarian power. "You MUST sit down!"

Obviously, the return of the teacher functions as a sign for the children to "be in their places". The children expect and are expected to subordinate their freedom to the teacher. For them, the returning teacher signifies that their place is nowhere other than their own desks. Depending on the tenor of the day, being out of their places might be interpreted as the ultimate sign of resisting teacher power, an act of insubordination, a defiance of all expectations, at once a act of the powerless and an act of power. Or the teacher might treat it as a matter-of-fact and resume instruction with little further reference to their brief absence from their desks. Yet perhaps by its very nature, the act of getting out of their desks is one of the few conceivable acts of independence that the children can make. Perhaps they make it, not so much in explicit defiance, as in a playful spirit of testing rules they do not seriously challenge. More significantly, it may be highly indicative, an implicit gesture, a reassuring assertion of their own humanness. Birds are caged and are not necessarily unhappy. Children conditioned by the conventions of classrooms find their own alternatives. But they too return to their desks in expectation; for there, in semiotic acquiescence, they are again ready to learn.

What must be deliberately taught through explicit teacher modelling and encouragement in many special education classes --the child's sustained position and attention that is prerequisite to learning--is tacitly assumed by all those who are engaged in that pedagogical relationship. In a junior class for children who are mentally retarded, their teacher smiles and says,

> Thank you for sitting so quietly.
> Now we can begin our lessons.

Proud of their success, the children smile at each other.

Kerri, a kindergarten child, in a very serious conversation about ways in which children can help their teacher, says,

> You should stay in your chair because other people can't work if you are bothering them.

When asked where she learned that, Kerri shrugs and smiles, "I just know that. And my teacher tells us that too."

A grade two teacher pauses in her explanation of how satellites are used in communication and watches as Mark surreptiously slides out of his desk, rounds the back of the row beside him and stretches his arm to pass a small toy car to his friend. Chagrinned at the sudden silence, he stumbles back into his desk and lowers his eyes. His teacher continues. A grade five science teacher is waiting at the front of the room for the class to assemble. The children take their places very casually. After a moment, she crosses her arms and taps the text against her elbow. A ripple rides through to those not yet in their desks. In a moment they are and the lesson proceeds without further interruption.

In a grade three class, the math lesson is almost over. There is a light tap on the door. It opens and David comes in slowly with, "I'm sorry I'm late." Alison, a girl at the front of his row, frowns at him as he takes his place. Abruptly she turns and with conspicuous self-righteousness sits bolt-upright, folds her hands and with chin held high, returns her attention to the teacher. The lesson continues as David rummages in his desk for his text. Jason, his best friend sitting behind him, pokes David in the back and scowls at him. He has broken too many rules: he is late; he was not in his desk; he is rustling about and disturbing the sight-lines of the others. He should have been in his desk. The censure comes because he wasn't. He is more than a disturbance to others; he has broken a tacit rule of classroom--the desk-rule.

This example is the portrayal of the three dimensions of the semiotic of a child's desk. Until David is in his desk, in his assigned spatial relationship to his teacher and the rest of the class, he cannot be in an intellectual, academic relationship with them. In its simplest form, he is not ready to think in the context that the teacher is creating within the lesson. At a more complex level, the affective impact of his lateness overlays his best intentions. Censure from his friends and classmates adds to his emotional burden at the moment. One cannot know whether he is wounded more by Alison's exaggerated enactment in front of him or by Jason's disloyalty behind him. But one can be reasonably sure that each of them, as well as the teacher, understands precisely the nonverbal communication that is occurring. It speaks the language of the broken desk-rule: the teacher's significant pause, the girl's exemplary modelling, the friend's censure, and David's own distress and frantic efforts to reinstate himself not only in his desk but, more importantly, into the order of the class as a cohesive unit.

Children Finding a Semiotic Space Beyond the Desk

Given the inevitability of elementary school children spending a great deal of their day in their desks and the relative flexibility of moving desks around within the classroom, many teachers change the direction or grouping of desks throughout the year. Some because they prefer certain blackboard spaces, some because of the angle of the sun into the room at different times of the year, others simply because they like change.

In an interview with Mrs. Wayne early in the second term, she explains why classroom space is periodically rearranged:

> Mrs. Wayne: I make a point of making changes. I like having as many of them as close to the board as possible...and to me. Whereas the other way, with twenty-seven now, the rows were getting so long and the room is so narrow. I don't use the board that much either. The only problem is sometimes with the projector screen. So they just turn in their desks.

[Any response from the kids about the change?]

> Oh, the day we made it, yes. They always think it's neat. Anything that's new is exciting. I stayed one night until about ten thirty, moving desks and rearranging everything. I started by moving my desk, the filing cabinet...that was pretty heavy. There are a few marks on the floor, but I did it!

[What was their reaction when they came in?]

> They went: "Oh, look! They changed my desk!" It took them a minute or two to find their own desks because I had changed desks as well as the position of their desk. So they had new neighbors. They're always excited whenever that happens.
>
> You move one desk and that personality is changed. It's great! They love moving, even if it's just one row or whatever. That was at the end of January. I usually get tired of things by then. It's like an early bout of spring-cleaning. {laughs}

Children react differently to the move, depending on where their desk is assigned. Some have gained an advantage; others have lost.

> [The classroom is a little different from the arrangement earlier in the year. How do you feel about the change?]
>
> Kathy: Well, I kind of like it, but sometimes I don't like it because I can see everybody because my eye catches the person that's standing at the door and I can hear the person very well. But it makes it all right because I can see some people that I know and I can say "Hello" to them.
>
> Nathan: I don't like it at all. I'm the only boy in the whole corner! Who wants to talk to girls all the time?

Of all the incidents involving children and their desks, one episode is particularly meaningful. On a cold, cold February afternoon, Mrs. Wayne is giving instructions for the children to work in groups on creative list-poems. "Imaginings", she calls them. The children are permitted to choose any area of the classroom or nearby hallway as their worksite.

> Mrs. Wayne: Okay, find a quiet place to work. You have twenty minutes to work on your poems.
>
> Children: Bonnie! Here!
> Under the table!
> What are we going to do?
> Get over there fast! Before the other guys!

In straggling clusters of teammates, they race to preferred locations around the room--under the teacher's desk, under the reading table, under the large table that holds the scale model of Fort Edmonton, under the math table at the front of the room, and to a small alcove in the hall between the caretaker's storage room and their own classroom. It is as if they are gophers, scurrying to their underground and secret tunnels.

> Matthew: We like it here because nobody can bother us or copy our ideas.

***

> Lisa: It's neat under here. We're lucky to get the teacher's desk. Everybody always wants to. I guess because it's really private. But I got here first!

***

> Mrs. Wayne: There's always a real rush for my desk. They just love it! And every year I have taught and allowed them to go wherever they want, that's the number-one place.
>
> I suppose it is a little more private, because it is small and dark. They are really secluded in there. Yet, when they go under there, they behave and do their assignments. If they want to stay under there badly enough, they will make sure that they don't do anything to risk it.

***

[My, you are a hard group to find! Why are you under this table?]

> Don: It's the only table left.

[Why do you like being under the table?]

> It's excellent! Like we have it all to ourselves. Like our own cottage sort of thing, eh?

The children obviously like enclosed spaces, spaces with boundaries visible or invisible. A group of boys settles in under the model table. Each one carefully draws his feet into the area beneath the table. Andrew reaches out and pulls his binder into that zone. At the front of the room, a group of girls has only room to huddle their heads and a notebook under the math table. Their sprawling legs form an imaginary octopus around its periphery.

Not one group of children moves toward the desks. No one makes a cluster of desks as a place to work. The six rows of desks stand empty. But the outer edges of the room are filled with children on their stomachs, on hands and knees, leaning with a hand holding the head, or sitting cross-legged with head bowed low not to hit the underside of a table.

What makes them run from their traditional place of desks and conventional postures? Is it that the desk is the ultimate symbol of individual isolation or of mass conformity? Do they instinctively sense that creative freedom is related to physical freedom? Is psychological freedom founded in physical freedom? Why is a freely chosen place better than an assigned space? Does being on the floor bring one closer to the reality of life? Is this why teachers so often have children sitting on the floor for storytime? Is this why librarians do? Surely, there is something here that is more than convenience. Watching these children find their own places and revelling in it, is a moving experience. And is there not something here of pedagogical significance?

In this semiotic experience, we see the children defining their own spaces, creating their own meaning out of the spatial possibilities that are offered by the teacher. Each space seems to create its own code of behavior, its own appropriate spacing and placing of children. It governs the volume of their voices, the proximity of their bodies and perhaps even the proximity of their minds as they strive to coordinate their thoughts and write their poems. Their deflection away from their desks is a sign that (although physically bounded by the classroom) they will create their own living space, away from the ultimate symbol of the classroom, their desks. So small a choice answered with so emphatic and exhilarating a gesture.

Over centuries, the small stool, the chair at the kitchen table, the tree stump in the park, the ornate oak and iron-wrought desks of the Victorian era, and the sleek alloyed and acrylic-laminated desks familiar to us in modern classrooms have all served the same function--to be a place where the body is at rest while the mind travels freely or directed, led by the words of others, by the inspiration of their presence, or by inner intellectual stirrings. The desk is the place of learning, ever-meaningful as a place of ritual and intent. It is the child's a pedagogical centre, his spatial semiotic epicentre. It never has been and never will be "just a desk".

***

Teacher's Space as a Semiotic Dimension

The child's desk is his semiotic space, the space that has particular meaning for him. In the same way, the teacher's desk and the space in which she moves and teaches carries a semiotic dimension for the teacher and for the children. Historical pictures show the teacher's desk at the front of the classroom, carefully centred in front of the rows of children's desks. In some classrooms, it was on a raised platform, symbolic of the teacher's governance over the children and perhaps of the distance between the amount of knowledge held by the teacher and that held by the children. In the contemporary classroom, the approach is considerably more flexible and the teacher's desk may be found in any part of the room: in an alcove, at the back of the room, along the window wall, in the corner, or even at the front of the room. As its position has changed, so has the amount of time that the teacher spends at the desk.

In many elementary classrooms, the teacher sits in her desk only at the end of the day when the children have gone. It has become more an administrative centre than a teaching station. It is where attendance records are summarized, standardized tests and piles of children's workbooks are marked, and where formal lesson planning may occur. By sitting at her desk, the teacher signals to the children that her work is important and that they are not to interrupt except in circumstances of great urgency. Being at her desk is often a deliberate semiotic gesture that temporarily sets the teacher apart from her direct involvement with the children. It is a sign understood by both.

While the teacher may ask a child to come to her desk for individual help, more often it is the teacher who comes to the child's desk or gathers a small group of children at a low round table or at the blackboard. Where once it was common for children to line up at the teacher's desk to have their work marked, now the teacher moves quickly up and down the aisles in a conscientious effort to attend to each child's needs as soon as possible (as the work is in progress), when a guiding word may be critical in preventing the child's errors from becoming engrained or in smoothing a transition through an uncertain patch of understanding.

So it is, particularly in the elementary grades, that the teacher's desk which once anchored both teacher and children to a given place within the classroom, has now given up that portion of its spatial semiotic power. The font of knowledge, once symbolized by the teacher's desk, has become "portable". A grade two teacher, young and energetic, in the space of some twenty minutes of a spelling practice lesson, visits each child's desk at least twice. She is there, at a child's side, seconds after the child's hand is raised. Frequently she squats down beside the child's desk, her face level with the child's as they look at the work done. For that brief moment, they are alone together in that enscribed space. Then on her way to another request, she checks the work of several children as she moves by. Often the child whose hand is raised looks up in surprise that she is already there. As I look on, I have the strange impression that she is everywhere. When we view the scene later on video replay, she is amused too.

> No wonder I always need new shoes! I didn't realize how much I move around. I certainly try to get to each child but seeing it on the video... Well, it surprises even me.

From a child's point of view, this seemingly instantaneous responsiveness from the teacher can only be seen as supportive and encouraging.

[Why is the teacher standing beside Tricia's desk?]

> Garry: Because Tricia had her hand up and asked what to read. She didn't know what to read and now she does.

***

[Why does the teacher walk up and down the aisle so much?]

> Roxanne: To see if anybody's talking. Or she might go to tap somebody's head to tell them to listen or to look at their work.

***

> Adele: And she's going around to make sure the kids get everything right. And if they don't, she helps them.

[Are teachers supposed to walk around to see the children's work?]

> Yeah! They have to.

***

But the semiotics of the teacher's space within the classroom is much more comprehensive. The mere approach of the teacher towards the classroom signals to the children that a different ambience is necessary once she is within the classroom. "She's coming!", and the children hurry to their desks to be in their places. A classroom without the teacher's presence belongs to the children, and they move freely and unself-consciously about its space as if asserting their authority or their right to use that space as they might choose. Some chase their friends around the desks. Others, standing a few feet back, stretch their necks to see if they can make out their marks in the teacher's book left open on her desk. Others gather at the classroom library to leisurely choose their books. Still others huddle in small groups to show their latest treasures--effervescent candies, smelly stickers, robot cars, a new watch, an autographed cast on a broken arm, or an unexpected letter from a pen pal or the Mayor!

As the teacher enters, some children will be in their desks, others on their way there. Others will hurry toward her with their news and needs. This is a personal time. Paradoxically, with a cluster of children around, each child must share with the teacher his particular message. The teacher's space is held by the very presence of the children, and it is for her to determine whether that moment is continued or terminated. If she pauses and listens, first to one and then another, more children come to gather around and soon, except for one or two children totally absorbed in their own reading, she is completely encircled by the children. Many of them do not have news to share but simply gather to be part of that private time before the teacher becomes a "teacher", distanced at the front of the room. Often a nearby child will stroke the teacher's sweater. Another one might offer to hold her books or get the attendance book for the next phase of their togetherness. Then, with reluctance, the teacher might smile and say, "We really do have to get on with our work. To your desks, please." The moment is broken but its value is not. The children take their desks and the lessons continue.

Should the teacher resent the children's spontaneous presence about her or have a sense of urgency about what is to be done, the message is as clear as before, "No. No, not now. To your desks right now. We'll talk about that later. We haven't time today." And the children step out of the teacher's personal space and almost visibly become "pupils". One elbows a friend out of the way. Another thumps his foot in annoyance and rushes to his desk, hurt and angry. A few persist: "But, Mrs. Wayne, I just... " "Not now." and the teacher hurries to her desk, picks up the text, maps or worksheets, and the lesson begins. But the tenor of the relationship between teacher and the children has changed. One might speculate that (at least for the children thwarted) there is not the same willingness to participate wholeheartedly in the day's lessons. It may be that by denying that brief sharing of teacher space and attention, the teacher inadverently creates an atmosphere of negativism. The impact, semiotic in nature, has been determined within minutes of the teacher's arrival in the classroom and, in some cases, appears to be irreparable for a considerable time thereafter. It may well be that spatial semiotics are set in place as the teacher welcomes or denies the children's nearby presence in the opening minutes of their relationship.

Further, there may be a relationship between the teacher's refusal to speak with the children in intimate proximity and their persistent raising of their hands throughout the lesson. Often their comments are totally unrelated to the matter at hand and as such are rapidly dismissed by the teacher. "That's not what we are talking about, Jimmy." "No, Lisa, you will have to tell me later." But for the child, those few comments are as a gift for the teacher, a gift that in the child's eyes is persistently refused. Some children will repeatedly bid for the teacher's presence and attention even to the point of risking censure. While it is not feasible for the teacher to honour each personal exchange request, for sheer expediency it does appear that at least some of these children should be answered. Where teachers are skilled at arranging equably for this one-to-one sharing of space and attention, there is a recognizable semiotic harmony in their classrooms.

Another semiotic dimension of the teacher's space is that of her frequent positioning and repositioning at the visual and spatial centre of the classroom. There is a pedagogical centre in the room, and there the teacher comes to present her lessons, to call for the children's attention, to administer a variety of tests, and to open and close the school day.

> [When the teacher goes to the front of the classroom, what does it mean?]
>
> > Heidi: It usually means you're supposed to sit down and be quiet because she's going to tell us something.

Standing at the classroom library bookshelves at the back of the classroom, Mrs. Wayne is taking attendance. She does this each morning and afternoon, always from the same place. Then, as always, she moves to the front of the room. She stands in front of Shawn's desk, touches it lightly, steps back slightly and begins, "This afternoon, we will continue our social studies discussion on the tasks the homesteaders had to accomplish in order to survive their first winter on the prairies. Last day we discussed the clearing of the land. Today we will continue with the planting of the first crops."

The introduction spoken, she steps forward, takes Shawn's worktext from his desk, opens it and holds it up. "If you will please turn to page 37, you will find... " She returns the book to Shawn and slowly walks down the aisle as the children find the right page. From the back of the room, she asks, "Christopher, would you please read the first paragraph for us?" As Christopher reads, she continues walking around the classroom and continues to do so until there is a natural break in the activity. Then she returns to the front of the classroom and the next phase of the lesson is introduced: "From our discussions before and from what we have just read, you should find it fairly easy to answer the questions at the bottom of the page. Will you please do that now?" She moves about the classroom, commenting and correcting, encouraging and praising as the children complete their task and move individually to work on the class mural at the back of the room.

The centre-stage position illustrated by Mrs. Wayne is commonly practised by teachers. It is as if the centring of the teacher gives both a point of reference and a kind of rhythm to the lesson. By taking that position, the teacher is indicating that for this moment, "We are together. We are consolidating our thoughts on this point of the lesson. As I move away, you too move away from the communality of our discussion to your individual interpretation and responses to the questions asked or to the tasks assigned." This pulling-together-of-the-group punctuates the lesson as a pacing gesture. Now together; now on your own. It is a gesture in spatial semiotics made quite unconsciously by the experienced teacher and rather awkwardly by the inexperienced. To watch the novice teacher take up this semiotic centre is to see him trying to centre himself as much as the children. It is like the determined but unsure centring of a novice potter as he attempts to centre the clay on a potter's wheel. The skilled potter does it surely, smoothly, instinctively, as does the skilled teacher. The novice does it deliberately, self-consciously, and tentatively. In both cases, skill comes with the practice, finesse with experience.

Certainly the physical space in which learning occurs is not the definitive influence on the effectiveness of a lesson, but it does play a role often overlooked or minimized. An interesting perspective comes from children invited to act as a teacher in front of a video camera.

Individually, they are asked to go outside the classroom, close the door, and enter as if they are the teacher of an imaginary group of children in the empty desks in the room. As the door opens, most say, "Good morning, boys and girls." Many stop briefly at the teacher's desk to pick up a book or turn the pages of the planbook. But time and time again, from kindergarten to grade six, these children take a position in the centre of the front of the room before the formal part of the day begins, before the lesson begins. Samantha, a bubbly kindergarten girl, comes in and moves to the centre

blackboard:

> Samantha: Today we are going to learn to make a couple of words. {Turns to the blackboard} The first one is going to be "MOM".{Prints MOM, steps back, looks at it} That's "mom". {Hand moves firmly down to emphasize the word as she says it. Still facing the blackboard} The next word is "DAD" {said loudly}. {Prints DAD...steps back, looks at it, turns to face the class. Points with her right hand across her body to the blackboard behind her} That's "dad". {She continues the procedure with the numbers one to ten.}
>
> {Returns to the front of the room and looks at me behind the camera.}
>
> Now what should I do? {Steps close to camera.} [We decide she could do some action songs to show how the teacher conducts these.] {Samantha asks if she can use the little chair nearby, then moves it closer to the centre of the room, sits down and begins.}
>
> Okay, we're doing to do some songs now. What songs do you want to do?...Okay....Let's... You don't know which song? Okay, I'll think of one....Why don't we sing "Head and Shoulders, Knees and Toes?" {Stands and does the traditional actions as she sings.}

Narana, a grade six girl, takes the spatial semiotics of being a teacher very seriously. She comes in the door to portray the teacher's opening procedures.

> Narana: {Gathers paper very quickly from the teacher's desk. Goes to the space in front of the rows of desk.} I am very proud of you. {Looks up at class, shifts paper into crook of left arm, reaches with right to take first paper off} I am very proud of all of you. Your work is just excellent. {Holds up one of the papers to display it.} Melinda's work is the best. She did such a good job. Now I'll give out your papers.
>
> ....
>
> The bell is going to ring. Put all your books away. {Pushes teacher's chair in to the desk. Takes a book, carries it back to Linda.} You can loan it but don't let anyone makes any marks on it. {Walks swiftly away. Back at desk, briskly straightens bookpiles on her desk. Adjust chair alignment to desk. Goes to the door, back toward the class, appears to be talking to child previously sent out of the classroom. Comes back}
>
> {Goes to the centre of the rows at the front, arms crossed. Takes brisk step back and to right} The row that is quietest will go first. {Waves left arm to class with index finger extended. Moves quickly to the door, closes it. (Real bell rings) {Comes back to the class, right hand raised} Okay, wait....{Waves extended left arm} Janice's row. {Moves toward door, her right hand points to door} Okay, go. Open the door when you're there. {Decides to go and open it herself. Comes back to centre position, waves left arm}....Lisa's row. {Waves right arm to door, moves to right across front aisles, looking at the desk}...and Michelle's row {Left hand extended and waved as if scooping row up, right hand points to door. Walks to teacher's desk }....Okay, good-bye. Remember to bring your report cards tomorrow.
>
> {Straightens books on desk. Quickly checks a question on the page on the desk. Hurries to door and calls:}....Kathy? Please give this to your mother. {Picks up paper from desk and

> folds it, holds it out toward child}....Give this to your mother, okay? See you tomorrow.
>
> {Goes back to desk, straightens. Goes to small table at the blackboard and straightens charts and folders there. Adjusts position of box on table. Moves away. Scans classroom. Goes to the closet at the front of the room. Takes out her coat and leaves, closing the door behind her.}

In Narana's enactment, we see the precision with which she moves in the space of the classroom, a space that takes on definitive meaning by what it contains, by its relationship to other spaces within the classroom, by the movement of children in and out of that space, and by the movement of the teacher herself. The opening of the door is the opening of the pedagogical relationship; its closing, its end; a beginning to the semiotics of the space of the classroom and a cessation to the ongoing exchange of signs. The time and space within those two gestures is rich in spatial semiotics, space affecting and affected by the nature of the interpersonal relationships within that space.

Janeen, a grade two girl, does her portrayal of a teacher in a small nurse's room where there are no desks, no blackboard, no books. She must become teacher without all the usual accoutrements of teaching that remain even in an empty but used classroom. She takes her place, her teaching place, in what in this small room is to become her pedagogical centre in the imaginary classroom. I suggest that she is going to teach an important lesson, something she would want all the children to learn. She thinks for a minute.

> Janeen: {Comes in the door, pretends to hang up her coat, turns, comes to the front of her class.} I didn't have time to look at your journals so do your individual math sheets now. {Goes to the teacher's desk (nurse's desk) and reads the children's journals. Gets up and checks up and down the rows.}
>
> {Comes to the front.} Okay, class! {Points to the blank wall behind her where she has envisaged a dental drawing} Now, to keep your teeth clean, you have to brush, floss and... {Places hands on her hips, tips head to one side, thinking} and don't eat anything sweet.
>
> {Points to the wall.}....Now, I drew a picture of a tooth {Her hand circles around the imagined diagram as she talks.}...and that shows how things are formed in the mouth area. {Looks to where the class would be.} ... Barry! Smarten up! {Shakes her head in annoyance. Points to the wall.}....This red part that I've colored in is the gum.... (Continues)
>
> ....
>
> [During math exercise that followed] {Comes to the front of the room. Holds hands on hips and looks over class. Raises index finger to lips. Walks to imaginary desk and says softly}....Henry? {Helps him} Make sure you add all the numbers. {Holding up her hands to show the combinations}...5 and 4, that's 9... and 5 more. That's 14. And 2 more, that's 16.
>
> ....
>
> {Come back into position at the front. Checks the floor as if to ensure that she is in the exact spot...smile leaves her face abruptly. Stands with her fist to her chin. Walks up and down the imaginary rows purposefully.}... I am going to count to ten...{Folds arms}... and if you aren't finished....That's one minute...{Paces up and down the rows, checking.}..."2"...{Points to a desk} ..."3"...{Continues to count of "10". Returns to front position.}....Okay, the first row is quiet. You may be dismissed... {Dismisses each row in turn.}

We see in Janeen's enactment her persistent and deliberate returning to the centre point as if it were a launching pad from which instruction must begin. In fact, it was her explicit dramatization of this use of spatial semiotics that first alerted me to the subtle meaning of space in the classroom.

However, this pedagogical centring of the teacher does not necessarily imply that the children automatically respond to its message. Even the experienced teacher may find resistance to the spatial symbolism of her assuming the front-of-the-class position. Bonnie is with me in the art room and we are viewing video scenes taken several weeks earlier of the activities in her classroom. Since then, there have been some sigificant changes.

> Bonnie: See, that's how noisy it was. Mrs. Wayne was getting fed up with it and so were the other kids that tried to work... {referring to the action portrayed on the video}. She just goes up to the front and just tried to do something, but kids just ignore her....The teacher tries everything she can but she just gets really tired. I don't know...she just sits down and gives up {pointing to the video scene}...like that. That's why she made new rules. No more talking like there was before....

[Is the class happier now?]

> I think so...because people are working more quietly now.

There are a number of issues revealed in Bonnie's comments. Many of these are related to the semiotics of the interpersonal relationships between children and their teacher. However, many are related to the spatial semiotics of the classroom. In the scene Bonnie has just described, the effectiveness of the teacher sitting on a chair in the front corner of the classroom is evident. The class becomes quieter and refocuses its attention on the work. When the children do not respond to her being in front of the classroom (a sign they are familiar with from their earliest days in group experiences with adult leaders and one they themselves practise in their own group activities), the teacher quietly moves out of that space.

In that nonverbal move, she indicates that for the moment she is giving up her pedagogical responsibility. It is temporarily in abeyance. Her sitting down is a sign that she has not only removed herself physically from the central position at the front of the classroom but that she has left her pedagogical position-of-authority vacant. She has visibly and symbolically removed herself from the children. She becomes unapproachable. Everything in her being indicates this--her posture, her expression, her silence, her distance from the pedagogical centre. Time stops. Now the class as a whole must resolve this shift in the tug-of-war between their non-academic interests and their academic obligations. They sense implicitly that the rules have changed. There is a new space. A new potential move is possible and it calls on them to make a decision. What should they do now?

Usually one of two events follow. First, children sensitive to the teacher's dilemma feel a responsibility toward the teacher and their own studies, and through expressions of their disappointment, frustration, and anger attempt to realign the non-conforming others.

> Marie: (in a conspiratorial whisper) Heh! You guys! Teacher's mad.
>
> Matthew: Yeah! Be quiet!
>
> Nancy: Yeah! Do you want us all to get a detention?
>
> Jimmy: {assuming an attentive position, but whispering over his shoulder}...I'll tell you after.

A sudden stillness descends. Slowly, Mrs. Wayne returns to the centre of the room, steps into that stillness and, in a very low voice, continues the lesson.

Or, it may be that no group consensus comes from the children and after a considerable wait and with varying degrees of annoyance the teacher will resume the instructional space earlier vacated and continue the lesson. In doing so, she reclaims her pedagogical authority by the gesture of reclaiming pedagogical space.

This use of spatial semiotics is a familiar phenomenon though an implicit one. Its importance can be seen in the descriptions given. Children and teachers have their rightful place in the order of things in the classroom. For each, the power of place is intricately interwoven with the expectations and aspirations of that place. Just as the children are expected to be in their desks for the majority of pedagogical exchanges, the teacher is expected to assume a position within the classroom that indicates her responsibility as a teacher. This may not necessarily be at the physical centre at the front of the classroom but it must be seen by the children as a position from which the authority, tradition, and intentions of the teacher clearly emanate.

For the grade five teacher, this position is the space at the end of the science counter across the front of the room in a classroom where the desks were facing the side blackboard. For the grade three teacher, this is her desk, centred in the front of the room. For a grade two teacher, it is the front of the classroom where she has placed a small, low table to hold her references as she teaches. A grade six teacher usually sits on the edge of his desk at the side of the room.

While it may be carrying the symbolism too far, in all these stances the teacher is facing the children. But perhaps there is more to this than visibility preference. Except for a child sitting in a parent's lap for story-time or Socrates in his perambulant mode, there is a spatial separation between those who teach and those who gather to learn. The teacher in taking this stance invites the children to "come toward" what is to be learned. But implicit in this is the teacher's undisputed authority to impose her decision on what is to be learned and in what space. So it is that teachers who gather the children in intimate groups (as they do in Magic Circle, or arrange the children's desks in a large circle within the classroom) may present a more accurate icon of the true pedagogical relationship--together we learn. The magic of any circle is in the equality implied and in the fluidity of semiotics possible between people as they communicate. The power of a pedagogical circle lies in exactly the same semiotic premise.

***

The Semiotics of the New Child

For those involved in education, the sight of a new child standing in the principal's office waiting to be registered has been referred to a "a sign of the times". The description is accurate in the conventional understanding of the phrase and in ways discussed here as "the semiotics of the new child".

In an era of high unemployment and recessionary economy, it is not surprising that there is a consistently high degree of mobility in Alberta's population. It is a trend reflected across Canada and reminiscent of the search for employment that typified the Depression Years. As families move in hopes of a better future, return to different provinces, move into low-cost housing areas, or assume new family affiliations, their children move from school to school. These children-on-the-move are in addition to those whose families have always moved by choice, transfer, or necessity. Stringent restraints on educational expenditures, greater opportunities for specialized educational options such as ethnic language immersion classes, religion-oriented programs, and increased possibilities for integrating children with handicaps into the regular stream of education have also created a movement of parents in search of what they consider to be the most appropriate education for their children.

The opening of each school term sees a new influx of children equal to, or more or less than, the exodus from the school. These children are from families of all economic, ethnic, religious, and cultural backgrounds and they move in and out of our schools in a steady flow. Some schools are more likely to experience dramatic shifts in their school population but no school is immuned to the movement of children at any time of the year. However, the reasons why a child comes to a school that is new for him do not matter to the children who are already resident in the school or in a particular classroom.

While it is possible to examine the effects of the new child on the children in the class from many points of view or to explore the effects of the move on the child, the matter will be discussed as it is reflected in the shifts in semiotic spatial relationships within the class; not as new children affect the meaning of the space of the classroom in a physical sense but as they affect the personal relationships already established among the children and between the teacher and her class. Yet in a paradoxical way, it _is_ a physical space that the new child must occupy to create these relationships for himself. This interactive space is semiotic (wrapping in sign exchanges) and in explicit and implicit meanings often expressed in new terminology and often carrying a history the child has no way of knowing. An intimate, interlocking bonding exists in the class and the new child who by his very presence insists that that bonding be altered enough to acccommodate him. To borrow Piagetean descriptors, as much as he must learn to assimilate, the others must learn to accommodate. For each, this is a new semiotic situation.

A View From Those in the Classroom

[How do you feel when someone comes into your classroom who isn't usually a part of it?]

> Denise: It depends. If it's someone from the other class, I usually don't mind. If it's somebody new, I feel different. I feel like it's _not_ my class. Because when it's somebody different, I usually get moved, and then it feels like a different class. I don't like that.
>
> And when I'm already sitting beside one of my friends, I _really_ don't like that. Right now we have a spare desk, so I don't think we have to move _everybody_ around, because we have a space for somebody.

Here, we sense that the very presence of the new child in the doorway of the classroom carries implications for the children within. It will mean a spatial rearrangement afffecting not only the physical location of the children's desks but also their current social proximity to their friends. Over time, the children have become familiar with the physical dimension of the classroom and while they may find that a new placement offers them new perspectives (perhaps even preferable to their former location), they see the presence of the new child as disrupting relationships previously established with their friends. This is of considerable importance, affecting as it seems their sense of confidence and surety in their learning environment.

An analogy might be made: The advent of the new student might be compared to that of a stranger coming along to sit on a crowded bench. Those already sitting there have no choice in the matter. Room must be made for the new person. "Where?... Who is to move?... Where to, when we are already settled?" But they are not the ones to decide, the teacher is. Wherever the place is designated, they must shift and shuffle to provide that clearing. This arbitrary placement of the new person descends on the existing order and those who are already seated sense their own vulnerability. So it is with children in the classroom when a new one comes into their midst. The nearness and companionship of their friends is threatened. Their places are necessarily being reshuffled and they have no way of knowing what their lot will be.

The poignance of awaiting placement or displacement is clear in Denise's comments: "There might be a chance you might be moved." "I really don't like that." Considering the advent of the new child in semiotic terms, the stability of sign relationships represented by desk allotment is, at the very least, tentatively and potentially suspended as the teacher considers the most appropriate location of the new person within the limited possibilities offered by the classroom's physical characteristics. It is important to note that the teacher may well take the opportunity to rearrange the seating arrangements for reasons other than the necessity of accommodating a new child. But the unexceptedness of that arrival allows plans previously held in abeyance to be completed. Typically, unless there are intolerable combinations of talkative children, the teacher indefinitely postpones moving children who create lesser disturbances. The new child's arrival however may bring new and disturbing changes in the ambience of the classroom.

It is interesting to contrast the effect of the arrival of an unexpected adult (the principal, a stranger, or another teacher) with that of a new child. Two girls comment on this situation.

> I don't even notice.
> I don't either.
> We sometimes talk.
> Because our teacher doesn't mind.
> We giggle and draw.

Obviously, within brief moments of the adult's arrival, the children assess their likely involvement and in most cases quickly determine that there is nothing in the adult's presence that concerns them. Typically, they use the time when the teacher is involved with someone else to continue their friendships. The visiting adult poses no threat to their classroom stability. He or she merely creates the opportunity for an interlude of pure child-talk, an opportunity quickly nurtured.

In semiotic terms, the visiting adult is a sign to which the children need not pay attention. Beyond their initial assessment of the situation, he or she is a sign they can disregard. However, the presence of the visiting adult is a sign to which the teacher must respond, bringing as it does both subject and subject matter. Meanwhile, the children will busily engage themselves in their private semiotic exchanges until they are recalled to the teacher's attention and the class as a total entity resumes its function. Until then, individualism makes its own semiotic pathways.

It is possible to see in these examples (the new child coming into the classroom situation and the adult requiring the teacher's time) that the effect upon the children is entirely different. The first situation is loaded with potential changes (physical, relational, social, and emotional) which will impress themselves directly on the children. The second situation appears extraneous to their lives. Even when only the very first moments are considered, the contrast gives weight to the significance of the entry of the new child into the life of an existing class. When the new child is led to his desk and begins the process of becoming absorbed in the lives of the children there, how much more does he impinge on established relationships and the expectations that are inherent in them? There is a whole world of questions that only the children themselves can answer.

A View From the Child Entering the Classroom For the First Time

When the person at the classroom door _is_ a new child, the experience of that child is often an awesome one. Children once new to the school were asked how they felt coming into the school as a new student. Their stories carry a certain poignancy.

> [How are you going to feel in June when school is all over?]
>
> > Danny: It will be hard because you won't be able to see your friends if you move. See, because I moved in January and I missed all my friends. And I didn't like that school but now I made new friends here and....
>
> [How did you feel when you first came here?]
>
> > I was kind of shy. I didn't know anybody.
>
> [How did you get to know people?]
>
> > We talked to each other. I said, "Hi, I am Danny." or something. And you become friends.
>
> [Why do kids need to be friends? Why can't you just come in and sit down, and be by yourself?]
>
> > {Grins} Everybody wants to talk once in a while.

[Why do you need to talk to people?]

> If there is nobody to talk to each other, you'd be kind of lonesome because you can't talk to anybody...or they don't know what you want to play, like they feel like playing football and the other person had the ball, you couldn't talk to them, so...?

In May, Christopher comes into the interviewing room with a bravado that from classroom observations I have learned to expect of him. He is chewing gum with a grinning open-mouth action.

[You can park your gum, Christopher, so I don't get all your snap-a-roos on the taperecorder.]

> If I throw it away, will you give me a new piece?

[I haven't got one.]

> I won't snap it.

[Just remember you said that.]

With the unexpected good fortune that sometimes comes to a researcher, I had been video-taping class activities when Christopher and the principal quite unexpectedly came into the room. It was the moment when Christopher met his new teacher, Mrs. Wayne, for the first time and when, for the first time, he stepped into the environment that would be his pedagogical home for the rest of the school year. While the sight of the camera and equipment at the front of the room no doubt had an effect on him, it was yet another "new" in the total context into which he was being introduced. (Soon after his parents' permission was obtained to preserve these first few moments on videotape and to include Christopher in subsequent class scenes.)

Now, many months later, we were sitting in the music room looking at the video of those first moments. I repeated the question:

> [How did you feel when you came into the classroom where you'd be?]
>
> {Christopher's voice dropped and I could hardly hear him.}
>
> Weird. . . Frightened. . . Shy. . . All those things.
>
> [Can you tell me why?
>
> Not really.
>
> [But there was that feeling in you?]
>
> . . . Just numb. . .
>
> {We both waited a moment.}
>
> [As you see here on the video screen, you were shown to your desk. What was Mrs. Wayne saying to you?]
>
> I don't know. I just asked her a question.
>
> [Why did you ask so many questions?]
>
> {laughs} I didn't know what to do!

It is particularly revealing to have a later interpretation of the same video scene from Nathan, a classmate of Christopher.

[How did you feel when you first came to this school?]

> Nathan: Yeah...I moved to here...and I felt kind of strange coming to this school. I didn't know anybody. I felt...awkward.

[In this video scene, you can see Christopher coming into the classroom for the first time. Describe him as you watch, please.]

> Well...he's coming into the room really slow-ly...and his eyes are looking all around. He looks kind of scared, I guess.

In Christopher's own few words: "weird", "frightened", "shy", "numb", and from Nathan's description of Christopher's image on the video, there is ample semiotic evidence of how he felt at that moment. We see and hear again his loss of confidence and the suspension of bravado in his speech and posture. He is vulnerable and he is alone. He has lost all his familiar landmarks of language and behavior. He literally does not know what to do. He has entered a new territory with its own semiotic characteristics and, for this initiation period, has to depend on the personal intercession of the teacher. This dependency, of course, changes quickly as he assesses what in this new situation follows the same rules and patterns of classroom behavior he has previously experienced and what here is different and calls for selective and initially unfamiliar behaviors.

The newness of Christopher's experience is similar to Anna's. She had attended another school for several months, and then returned. She describes her feelings when she first learned that she would have to change schools.

> Anna: I was mad at my Mom and my Dad. I was sad when I had to move; but when I moved, I was happy because I was meeting new people.

Anna's comments reflect the consolation often offered by parents, teachers, and classmates alike. They sense the child's disappointment at leaving friends and her excitement about venturing into a new and unpredictable social environment. Fortunately, Anna's spontaneity and joi d'vie made it easier for her to blend into her new setting.

> I fit in perfectly. {laughs} I don't know why but....Like when Roxanne first moved into our classroom, she felt she wasn't...that she didn't fit in because she was different. I just went and talked to her and said, "Roxanne, it's okay if you're different. It's fun! Because you're not like everybody else. You're not boring and you just have your own way." So when I moved, I just did the same thing.

In describing her adjustment to the new situation, Anna tells of making the transition from the known and predictable to the strange and unfamiliar.

> The teacher was nice, but when it came to advice, she wasn't like my last teacher. If I asked her a question, she would give me the answer and go onto something else. She'd say one word. Like I wanted to go to the bathroom and she'd say, "Just go down there." and she pointed.
>
> Or when I asked her how to do a question, she'd say, "Well, figure it out." Or she'd

> leave you in the middle of a question when you didn't know what to do at all. That's why you asked her! And she'd just leave you and go on to other students.

Implicitly, Anna tells us that she had brought with her a repertoire of signs and signals that had functioned well with her previous teacher. This repertoire had been explicitly and implicitly established by Mrs. Wayne and practised by the children. Now these same signs and signals did not hold the same meaning or value in the new situation. Only over time did Anna put aside her expectations of mutual communication through the sign systems she had become accustomed to and gradually assimilate those of the new classroom.

Anna seemed to feel the same dislocation that immigrants experience in a new country: the bewilderment, the frustration and, finally, the slow acceptance and adjustment to a different order of semiotic interaction. For even if the language is virtually the same except for local idiosyncracies, the subtleties of nuance are not. The pace and manner of presentation is different. The expectation and pacing of responses follows a different rhythm. A stranger, by definition, is one who does not know. He comes into this milieu and the person he is suddenly becomes painfully self-conscious and conspicuous. His language and actions do not yet fit into the flow of conversation and understanding that familiarity has engrained in others. As all "new" children do, Anna faced this difficult transition at least once. Some must do so many more times.

A View From the Teacher's Side of the Desk

Before considering the interview with Mrs. Wayne and her role in helping the new child become part of the class, it is revealing to hear Anna describe her perception of her former teacher's reaction to having a new student brought into the classroom. There is a certain astuteness in Anna's observations of how the teacher experiences the situation from her side of the desk.

> At first the teacher really didn't like the idea of me coming into that classroom. Like my Mom asked if I could go. Like she asked the principal if I could go into her classroom because Susan was there. She is a friend I had when we were in kindergarten.
>
> The teacher wasn't too happy because she already had thirty-two kids. She was kind of ...snotty, you could say. But then when she got to know me, she was nicer.

Earlier, Denise had expressed her feelings about the presence of a new student as an intrusion on the estabished physical order and social relationships of the children. In Anna's comments, we sense that a teacher can be affected in much the same way. Some dislocation is inevitable. Administrative decisions can rarely be questioned. There are few choices for the teacher. But the astute "new" child is not unaware of the feelings stirring in the teacher because of her arrival. As much as the teacher is looking at Anna waiting to be invited in, Anna is looking at the teacher and assessing the quality of that invitation.

Turning to Mrs. Wayne's comments on how this mutual adapation is undertaken, it is evident that the teacher's role is complex and thoughtful.

> [How do you introduce new kids into an ongoing class?]
>
>> It really begins before they arrive at my classroom. After they have registered with the principal, our counsellor usually shows them around the school and accompanies them to the classroom. Then I introduce them to the class by name. Now somebody will always say, "Can I show him around the school?" {laughs} That really means: I get to skip recess or I get out of doing math. But I can say, "No. They've been shown around the school."
>>
>> I usually say "Who will mind showing...(and of course every hand goes up)...where we play at recess and show him which washroom we use and which fountain?" After that, they tend to (most of them) fit in really quickly when somebody take them around. It may not necessarily be the first person I appointed but they get into a group fairly quickly.
>>
>> Danny and Ian happened to come to the school on the same day. They met in the office so they had something in common right there. They've tended to be together most of the time. Of course, Nadeen got along with Cindy right away because they are somehow related.
>
> [How do you get them acquainted with your procedures and house-rules?]

It's really tough. So often they come and they don't have the school supplies we are using and you'll have some who don't have any. Then I have to phone parents and work it out.

When we're into a lesson, I hold up the book and say "This is the one we're using now." I usually write down the title of the subject on each of their scribblers. Just to save time. And I'll say, "Do it this way...I want the title, page, and date..." But it is a review for the others too.

Today, for example, I held up the social studies duotang and said, "Be sure your margin is on the left side before you start." But Ian came up and said, "Why are the holes on the wrong side of the page?" {laughs} I wonder why! And he said, "They must be made wrong," Oh dear! So those kinds of things, they pick up eventually.

Magic Circle always works out very nicely because the first one they attend, I say, "Oh Ian, this is your first time. You'll really have to listen and pay attention and see how we do it." Then I'll say, "I'm really glad to welcome Ian." That helps him feel like he belongs. I make a special effort to say "I hope you're enjoying Magic Circle time." or whatever.

Then at the end, I'll say, "I'm glad, Ian, you were able to be here for Magic Circle. I hope you enjoyed it and maybe next time you'll be able to share." (If he hasn't shared that time.) So in that session, I'm able to say a number of things to include the new person.

Even when I'm saying the roll-call in the morning, I might make a special comment like, "Oh, I'm glad to see you back today." For instance, when Nadeen came in late today, I made a special comment to her. "Oh, Nadeen, I'm so glad you're here today. I was so concerned that you might be away again. And I was worried about you." In her case, it may be particularly important since she has missed so much school already.

> That's why I said it, so she would realize that, "Heh! Mrs. Wayne is glad I'm here! She doesn't want me to miss." So whenever I can, I try to make them feel that they're part of the class.
>
> I'm reminding the others too that here's a new person. Let's not forget that they are here. I'm noticing them; you notice them too.

[How long might this absorption process take?]

> Usually about three weeks. But, by then, they have their own connections and are just part of the class.

So it is that ideally, within approximately three weeks, the new child has evolved from a total stranger to becoming an integral part of the semiotic relationships of the class. He has physically accommodated to his own desk, has adapted to the routines and rules of the classroom, has gradually made links into the various subject themes being taught, and has begun the process of making friends and sharing in their school and community life. Spatial, relational, and pedagogical patterns become familiar (if not habitual) during this time and the "newness" for everyone gradually fades. Then one day, there is a new new child at the door....

When at the daycare and kindergarten level we look at the entry of a child into a new learning environment, we readily accept that there must be an adaptation period. The child will need our patience and assistance to ease him into this new life. But as one teacher points out, when a child in the elementary grades or later transfers from one school to another, we speak of the transiency rate--the number of children moving in and out of our school. We are concerned whether they are in the same reading series or spelling workbook, or whether they have completed the social studies unit we are about to begin. We may be considerably less diligent than Mrs. Wayne in our approach with new children.

Whatever our roles, we must not overlook the poignancy of the child fitting into the new learning context. We have professional solutions to bridge their academic differences, to locate different and appropriate learning resources, and to determine seating arrangements. But it is vital that we consider more closely the new child as someone who must accommodate to and assimilate semiotic variations that create and sustain human interrelationships within our classrooms. Unless we foster a more perceptive and enduring reception for the children who move in and out of our school with increasing frequency, we will face again the pedagogical dilemma of the child as she described herself earlier:

> If you're a new person in school, it's really scarey! Like....When I was new at the other school, I was just...{holds her body tightly and draws her knees up slightly}...You sit there, you know....You look at everybody around you. And everybody is talking to their best friends beside them. And you are sitting there in the middle of the room...just sort of looking around...not knowing what to do.

Lessons Outside the Classroom as Different From Those Within: An Extended Semiotic Pedagogical Space

Lessons held within the classroom are certainly more common than those held outside of the classroom. The majority of lessons are taught within the classroom and these are discussed in "The Semiotics of Specific Pedagogy" (infra.:479). There is a particular value, however, in considering a single lesson which Mrs. Wayne taught in the school playground. To be accurate, it was but a portion of a lesson. It followed an introductory lesson on haiku and was intended to enhance the children's sensitivity to nature and add to their repertoire of thoughts and feelings prior to their writing haiku of their own (infra.:499). Immediately following the outdoor experience, the children returned to the classroom to write their poems. But from the children's comments about their relatively brief outdoor experience, there are important insights to be gained concerning the rarity of such experiences and their pedagogical implications.

It is a warm October afternoon, a typical autumn day except for small drifts of snow in the shadowy corners around the school. As soon as the children come in at the afternoon bell, Mrs. Wayne tells them not to take off their coats. She explains that they will walk around the schoolground and collect ideas for writing their own haiku poems. A bubble of excitement greets this announcement and the children hurriedly line-up at the door, sorting themselves out in groups of friends. A few stragglers, without any permanent affiliation, cluster together and form their own kind of group. What happened in the next half hour is described in the children's words and in my impressions of the experience.

> [What did you think of today's lesson outside?]
>
> > Sarah: I liked it when we went up on top of the hill and we got to pick some foxtails. We got to stop for a while and sit on the hill and talk about some things. And we got to stop at the ice rink and look at the foxtails and other beautiful stuff.
>
> [It was kind of funny to see all those weeds filling the ice rink, wasn't it?]
>
> > Hmm. Yeah. I thought there would be ice! Instead of grasses! But once it comes to summer, the ice has to melt.
>
> [Of course. But it was funny to see them together, wasn't it?...You said there was all kinds of nice things?]
>
> Well, there was some garbage. Because there were flowers, and leaves and it was windy, just a little bit. {Moves both arms fully outstretched in a slow undulating wave} It made it move.

Sarah's first comments express the joy of being outside and her sensitivity to the visual patterns made by the wind as it moved through the long, dry grasses. As she speaks, I remember the children's exhilaration of running hard across the playground, of their turning somersaults after their teacher, making a curious pattern of tumbling and upright bodies rolling and rising, rolling and rising. I remember their racing up to the top of the hill and throwing themselves down, breathless and happy. I remember too their standing on the hill and slowly raising their arms to the sky as Mrs. Wayne said, "Let the wind blow through you. Don't stop it. Let it blow through you." How different these children were now, especially when compared to when they were sitting in the classroom that morning.

But somewhere in this experience-in-space is a pedagogical intent. As we walked slowly back to the classroom, I talked to the children. They have long since become accustomed to my questions and the tape-recorder at my side.

> [When Mrs. Wayne took you out this afternoon, she was trying to teach you something or to make you aware of something. What was it?]
>
> > Bonnie: She does that to get us relaxed and enjoy ourselves.
>
> [How did that connect to the haiku?]
>
> > To give us some ideas about what to write about in our poems. That was the first time we ever did that.
>
> [Can you guess: is she going to do it again or not?]
>
> > I think so!
>
> ***
>
> [What did you think of today's class, outside?]
>
> > Nancy: I thought that was fun! Like me and one of my other friends, we like running around in the grasses, and laughing, and

> talking, and having the wind blow in our faces.

[Today was a good time then?]

> Yeah!

[What do you think Mrs. Wayne was trying to teach you by doing that?]

> Trying to teach us ideas for haiku and trying to see if we could stay still and listen.

[Why did she try that?]

> It was also to see... I mean, if we were really bad, she wouldn't take us out for a while. If we were good, she would start taking us out more.

[Was it sort of a test of how you would behave outside?]

> Yeah.

[What do you think she will decide now?]

> I think she will decide yes. Except for some of the people, like Matthew and Brian. They were sort of goofing-off.

I return to the school several days later. There is an attractive wall display of the children's haiku. Each poem is illustrated and mounted on free-formed coloured paper. From a distance, each one looks like a gem set in the wall. At recess, Bonnie leads me over to the display and reads a number to me:

Rainbow blue, green, red
You look so nice with flowers
Rain falls from the sky
Bonnie

I saw horses galloping
Tossing their manes and running fast
Then they disappeared
Shawn

I like some flowers
There are beautiful flowers
Weeds growing there too
Sarah

My skating rink is funny
There are tall weeds growing in it
If I skated, I'd trip!
Danny

Pirates got on a ship
They killed everybody on deck
Then they sailed away
Paul

The next day, after the children had gone, Mrs. Wayne and I sit over coffee for a prearranged interview and she describes the context of the haiku lessons and her reasons for taking the children outside:

> [I see you have the children's haiku up on the bulletin board now. That was a super film you showed the other day! Especially with the syllable sequence.]
>
> > We have another one coming in Monday. It would have been better for the first film for this class. Although this one works well because there is so little talking. I had ordered both but one was already booked out. I wanted it particularly for the grade sixes. I do their art with them and I wanted them to do covers for their haiku booklets.
>
> [So it is an ongoing theme in the school?]

Yes. So any kids that have had me in grade four, find that they get it in grade six too.

[And I have seen the grade two classes working on haiku too.]

Yes, a lot of teachers have tried it with their kids. And of course, the kids get better at it too.

[Why did you take them outside yesterday? {Teasing} I thought the classroom was in here?]

{Laughs} Oh no! Whenever I can get outside with them, that it what I like to do. I loved it at one of the schools where I taught. We were so close to a beautiful ravine. I used to teach so much down there! You could see it in their haiku today. The wind...blowing in their faces...that really got them thinking. Just feeling that wind. It was beautiful!

[I wish I had had a camera then! You had drawn the wind to their attention. I was standing at right angles to them. All these beautiful faces looking up at the sun! The sun just gliding over their faces. Such contented, basking faces. Oh, it was beautiful.]

As soon as they experience...they can write. As soon as they have experienced it physically...they went out and felt the sun.

It used to be a big joke in the office when I had the grade five and sixes. I'd go by the office and say, "We're going to the bushes!" {Laughs} The secretary would say, "Ooh!?"

I used to get more from the kids whenever we came back from a place like that. And when we are on our camp, I'd just let them go out for a half hour and find a quiet spot...by the lake, or in the bushes or around the camp. The things they would come back with!

[That has a lot of implications, doesn't it?]

Certainly does.

[And that's different from getting it out of a book.]

> There's no comparison!

[Let me think: Nancy said something...? You'd been outside. You'd seen the film. And you had a book on haiku here on the ledge. When she was formulating her own haiku, she came up and read her haiku to me. She said the water on the leaf, on the cover there, had given her ideas. She said her ideas all came together when she looked at that. I think it showed up in some of her haiku.]

> Yes. She has some very nice ones. They do get a lot from pictures too.

[But maybe what I am trying to say is that they get a lot from pictures if there is an experience to associate it with.]

> Oh, I see what you mean. Yes, if I had just shown them the pictures? Yes, yes, I think you are right. I've done it before just using pictures but it's much better if you can go outside.
>
> Just to go outside and look at a tree or feel the sun or look at the sky or hear an airplane and come back and write. I don't know why but you do get so much more out of them. You do see a definite difference.

[Let me make a statement and then ask you to react to it: I would bet that kind of experience happens only in the language arts. Is that true?]

> Well...(pause)...mostly, yes. Math: we do get out our manipulative things or they take a ruler and measure down the corridor. If they actually do something, they learn it much more quickly. But yes, language arts does lend itself more easily to doing things like that because so much is described in words.
>
> Social studies: there doesn't seem to be that much...although, even there, if you make pemmican or you make a beaded necklace or you go to the Fort or go to the Museum, you can extend so much from there. Last year,

we went to Rutherford House. It was amazing what these kids could tell you about Premier Rutherford and when he was in office. The whole idea of being a premier, all of a sudden, made sense. They had gone to a premier's house. They could visualize that time in our province.

[Did you follow it up with visiting the present premier's home?]

{Both laugh.}

I don't think he'd let us in!...So getting outside of the classsroom does happen in other subjects, but mostly with language arts. There's also the enjoyment too and that makes a difference.

[But, if you thought about it, could you make (for want of other word) a reality-link in music, linking it to the outside world, the real world, if you will?]

Mmm....I can't think right now...in music?

[The only example I can think of is maybe going outside and listening to the wind through the wires or the rhythm of traffic on a busy corner.]

(Doubtful) Yeah...I suppose. Not as easily as other things though. In music, we teach them so much about tones and structured music as opposed to just sounds. It might work if you were doing abstract sounds as music.

Once at the other school, once it was spring, we sang down in the ravine and just being in the trees and outside made a difference. They just wanted to sing and would really enjoy it. It seemed so much nicer than just sitting in a chair in a classroom. Or at camp, sitting out under the stars, watching satellites go by and the campfire in the middle, and singing! It meant so much more.

[Can you define that different quality?]

Music was just a part of your life there, of your existence then rather than something you are learning in school. Then, it's just a song. "We are learning it because the teacher

> says we are learning it." But we were singing it out there because it was fun. We wanted to sing it. We were glad we had been taught it in the classroom before so we knew it, but now it was fun to sing!
>
> {Sings}
> You get a line and I'll get a pole, honey!
> honey!
> You get a line and I'll get a pole, babe!
> babe!
>
> They used to love that one. They loved it inside too, but when they were outside, boy! Did they start moving around a bit too!

While Shawn confirms the appeal of being outside the classroom, he finds there is no magic in a different semiotic space, rich though it may be in sensory impressions and enjoyment.

[How did you like going outside for your lesson?]

> Shawn: That was really neat! Just to get out of school. I like that. And when we were on top of the hill and Mrs. Wayne was telling us to look at the clouds and see if we could see any patterns. I saw a horse right away. So I decided my haiku would be about horses. Except, it was kind of hard to write anyway.

***

[What did you think of today's lesson outside ?]

> Paul: It was okay, I guess.

[You don't sound as if you enjoyed it?]

> Well...I wanted to write about pirates and we just walked around.

[Maybe you could have pretended the hill was your ship and you were on the ocean....]

> I guess so.

[Did you write about pirates for your haiku?]

Yeah, but it wasn't very good.

[Not your day]?

Ugh-ugh...

For some children, as it was for Paul, being outside doesn't help creativity. For him, Mrs. Wayne's intentions didn't coincide with his and his haiku writing didn't come easily that day. For some children, contact with the real world rather than with film books and conversation is a powerful stimulus to their thoughts and expression. For others, the task is no easier whatever the experience is to be. But it is another experience for the children and its dividends may appear much later and be of no less value.

A few years ago, I took a group of grade six children on a "field experience"--(a term I prefer because it implies a greater interactive relationship between the children and the new situation than that conveyed by the more commonly-used term "field trip").

As Ransdell points out, learning results from attempting.

> The English words "experience" and "experiment" both descend from cognates of the Latin "experiri", which means to attempt, to try, to test or try out, to prove....There is experience when and only when one finds oneself in a confrontation with something other than oneself and one's ideas that has the power to do something to one...
>
> (Ransdell 1982:432)

It was this kind of involvement I tried to create for that particular class. Consequently, prior to our visit to the Strathcona Archeological Science Centre, the children had written for the information guides available. They had worked in small groups, scanning the wealth of information for key ideas to present to the class. The visit to the archeological site was exciting, informative, and revealing. Although the children had read of archeological digs in other countries, they had not been aware of such activity in their own city.

Now, because they were prepared, the children knew the terminology, had questions in readiness, and generally challenged the guide with their insightful comments and comparisons. This particular field experience was much more meaningful for these children than a similar one had been for another group I had taken who had been exposed to far fewer preparatory activities. The implication for pedagogy is clear. Taking children into new realms of experience--into new semiotic spaces outside the classroom--is like taking them into a foreign country. Unless they have the beginning-links of the language and concepts for what they are about to experience, they derive little meaning and less reward from the efforts of everyone involved.

But the telling does not end here. A few days later on our own turf, we had our own archeological dig. We wandered just two blocks from our school and back. Our community was a new one and there was abundant evidence of construction debris everywhere. The children collected samples in old shoe boxes or lunch pails, drew location maps of their finds, sketched immediate surroundings to provide site-context for the bits of metal, wood, plastic, styrofoam, pop can tabs, insulation clumps, sheeting or the webbed foil they picked up. Then pretending, as we had been all along that we were of some future time, the children speculated on their finds and what these implied about the society that had used them.

As we returned to the school, we paused at the typical dusty green community-mailboxes. When I asked the children to remain in their archeologists' role and speculate what this object might have been used for, their answers came quickly:

> Gordon: I think it was a miniaturized condominium. You see, the world got so crowded that they had to shrink people to make everybody fit in. This is where they lived.
>
> Michael: No. I think that...because there were so many wars...this was a thing to hold ammunition--rifles and guns and lasers and things like that. Maybe the mayor..._no_, somebody in each community...had the key and if there was a war, then people could come here and get some, to protect themselves and things like that.
>
> Candace: Well, _I_ think it was to keep babies in. Tiny ones, frozen ones, you know what I mean. So, in case of war and lots of people would be killed, then somebody left could raise these babies and the world would have people again.

***

It does not matter that there are no right or wrong answers. What does matter is that, in their own world, standing on the street in front of the bank of mailboxes, the children could create meaning out of that environment. It is not hard to guess that their ideas come vaguely distorted from television, from their own reading, or from half-overheard or half-understood adult conversations. What is important is that they brought these ideas to mind when faced with having to make a new interpretation of something known and familiar. This is what lessons outside the classroom can offer the children--the opportunity to explore ideas in the space of their own world. Strangely, this frees them as the traditional classroom rarely does.

But there are many reasons why some teachers feel as uncomfortable about teaching outside the classroom as Sarah does about their doing so.

[How did you feel on top of the hill?]

> Sarah: Well, I felt sharp grass on my legs...and nervous. Because whenever I go outside with a teacher, I feel nervous.

[Why?]

> I don't know...

[Where do you think teachers are supposed to be?]

> They're supposed to be in school teaching children.

[But today, she made her classroom outside. Were you nervous because it was a little different?]

> Hmm.

[Have you played on that hill by yourself?]

> Well, with my brother. We go there in the wintertime and roll down. We keep our sleds on the top of the hill, then *we* roll down and get all cold!

{Both laugh.}

[But it does seem a little funny to have Mrs. Wayne out there on your hill?]

> Mmm....

Sarah's words tell us that she defines her teacher within the classroom, that *that* is the teacher's space. When the teacher leaves that space, Sarah finds it strange that her teacher's responsibilities are carried into her child-world. It seemed as strange to Sarah that the teacher should be teaching in the children's outside play-space, as it would be for the children to play their personalized outdoor games inside the classroom. Part of the strangeness that Sarah feels may come from Mrs. Wayne's presence on the hill that Sarah knows as a play-site with her brother. All the more strange that her teacher, an adult, should be where children play. Stranger still, that her teacher should play as a child, somersaulting across the grass and whirling with her arms outstretched. What meaning does she give to this, the children's space? Has she taken it from them? Or enriched it? For children (indeed for all of us), each space suggests an order-of-things. What is Sarah to make of all this?

The feeling of place
is a power within us.

James Reaney

When the teacher takes the children outside to participate in a lesson, the expected order is disturbed. The concept of the person in his identifiable space is also disturbed when the teacher is seen by the children at the shopping center, in a public park, or at a movie. During an interview the following January, Mrs. Wayne comments on how children perceive their teacher in an out-of-school context:

> Mrs. Wayne: I think the kids tend to see teachers as perfect beings. I think they would be very surprised to find out that, in fact, we are ordinary people.
>
> My husband and I were at the baseball game last year. He'd come up with some two hundred tickets for the kids at the school. So all these kids went to see the game with the Trappers. One of the kids was sitting down about two rows in front of us. My husband had come back from getting a couple of beers at the stand. The kid looked at me wide-eyed and said, "You drink beer?!"

[You crossed something that he didn't expect.]

> Right, he just didn't expect that.
>
> They are always, always intrigued by your first name. Your "real" name, they call it. Today someone asked me how to make a "J", so I showed them how, and I think it was Lisa who piped up "Janet Wayne!" So they like that. It is something that is different. I can remember in high school, it just really surprised me...and that's high school level...to see one of the woman teachers go into the washroom. You just don't think of

> those kinds of things. Or I will say something like, "I cooked supper." or "I washed the kitchen floor." And I'll get a comment like, "_You_ wash the floors?" They are surprised somehow that you are a human being, like their mom. They don't see you in any other context. You are a _teacher_. They don't see all the other things you do like everybody else does.

It is as if, illogically, the teacher exists only _in_ the classroom _for_ the class. Intellectually, the children realize that, of course, this is not so. But in terms of their expectations, that is where the teacher belongs. If we think of this in terms of signs, the analogy might be: the teacher's presence in the world outside the classroom appears to the child as a typographical error--the wrong letter in the right place.

But there is something important here that we should not lose. If, as Atwood writes,

> By discovering your place
> you discover yourself,

then what are children who see education limited to the school site, the classroom--_their_ classroom--telling us? If in their minds, education is delimited by physical space and the teacher is an exotic being within that space, then is it any wonder that they do not see what they learn _in_ school as even remotely relevant to their world outside of the school? Is it any wonder that they do not see what they learn outside of school, in all the time and dimensions of their lives, as even remotely relevant to the world they live inside the school? Is this separation of space--as a space for learning--not a detriment to a more kaleidoscopic, more encompassing view of learning? Further, do we not then perpetually foster an implicit sense of closed and excluding boundaries to what and where children can learn? Is it not crucial that we do not limit their attitudes, behavior, and aspirations to a single and narrow physical or mental space?

Further, and perhaps even more importantly: if teachers consider out-of-the-classroom and into-the-real-world activities only as a rare treat, an opportunity to take advantage of a glorious day, or as a break from the routine of classroom-bound activities, then they too have fallen heir to the delimiting notion that only what occurs in the presumed sanctity of the classroom has overriding validity. By narrowly defining the place of learning, they implicitly limit the content and range of learning to the textbook, to the finite resources in the school library, to audio and video tapes, etc., to that which is already once removed from living, to that which has been preserved. To the past!

But then pedagogy is "preserved" in the same sense that Victor Cicansky's ceramic cupboards with their ceramic jars of ceramic pickles, jams, and fruits are preserving for the long winter days a memory of grandmother's harvest. The danger is that, like Cicansky's objects of art, education becomes solidified rather than fluid, defined and definitive rather than exploratory and open-ended, and confining rather than freeing the children to learn about the world and themselves. Ultimately, there is the risk that their taste for learning will become fossilized: that their education is seen to be something that occurs only with the sanction of a teacher and only in a place designated as a school.

How much better to nurture a curiosity about the world, to stretch the vista possible. How much better to nurture the power within the children, already there in embryo--to open themselves to and absorb the richness of the world. The sense of exploration is inherent in the child from his birth (and many now argue, even before). Gradually, with guidance and care, each child explores further and further, and in that very process, learns more and more. Dr.Gerard Herzberg, Canadian Nobel prize winner for Chemistry in 1971, during a CBC-TV profile (January 1985), remarked that it is man's delight and wonder about his world and his ability to ask questions that separates him from the animal kingdom. The classroom must not terminate a child's inquisitiveness. The power of the person lies not in the space he occupies with his body, but in the space of the world through which his mind might travel. Such can be the gift of lessons outside the classroom, lessons in the open-ended semiotic space of life and imagination.

Diorama as Metaphor for Pedagogy

Part of the visit to the Provincial Museum in December, 1984, which concentrated on the Indian Exhibit as a culmination to the social studies unit Mrs. Wayne and her class had undertaken, was an impromptu visit to the Habitat Exhibit. In the brief period of time that remained before the chartered bus was to arrive, Mrs. Wayne suggested that the children walk through the Habitat area.

Tony is walking beside me as we approach the exhibit hall.

> [Where are we going now?]
>
> > Tony: It's the habitat.
>
> [But what is a habitat?]
>
> > We live in this kind of habitat. {Circles his arms around and behind himself.} And... like...the deer, lives in a prairie habitat. {Points to the scenario of deer behind glass}
>
> [Yes, but why is this area called a habitat exhibit?]
>
> > It shows where they live and it shows how they live in our lives.

Tony has given as good a definition of "habitat" as can be found in the dictionary but, more importantly, he has added the insight that the museum habitat illustrates how the animals live in our world. Though the distinction is fine, Tony infers that, in their own perceptions, animals live a different life (though geographically in the same place) from that which humans might perceive their life to be. The skilled habitat artists have included many of the fine details we see in nature, but animals, if they were able to explain, might give greater or less emphasis to what it is that they see and relate to in that environment. As T. Uexkull writes:

> Every subject can perceive only the activity of its own receptors, never that of the receptors of other subjects.
> ...
> As animals cannot describe their signs to us, we cannot be sure what is going on in them when they receive them. Signs received by others escape our direct observation.
>
> (T. Uexkull 1984:191)

Tony explains that he has been to this exhibit hall often, and as we walk about he points out the grizzly bear cubs' playfulness, the proud thrust of the moose's antlers, and the tension in the mountain lion's haunches. In a sense, his astuteness honours the etymology of "diorama": from the Greek dia--through, and horama--a sight. Not only does he see through the glass-case to the modelled animals set in a naturalistic background, but he sees them as if they are living.

We join the children, chattering to themselves as they point to displays that appeal to them. They move on to another habitat. Created by Ludo Bogaert and the museum staff, it is a diorama depicting the trumpeter swan's nesting grounds near Grande Prairie.

Cindy: Look! It's real water.

[Is it?]

Paul: Of course not!

Andrew: Heh! This is the story we are reading!

Cindy: It's the trumpeter swan! We're reading that!

Sarah: That guy in the water is the swan!

Cindy: Look at the big feather in the back!

Paul: But it isn't real water.

[What is it?]

Cindy: It's plastic! But there is water underneath it.

[But where is the egg?]

It's right there. But it's just plastic.

[Why is the egg not in a nest?]

Because it rolled out!

Sarah: Those are real eggs but they won't hatch.

The excitement with which the children recognize the trumpeter swan comes from the relationship between of a story recently read in the classroom and the scene created before them. Their story takes on a new signification. It described what birds, just like these, experience in their life cycle, (at least as interpreted by people and expressed in their language). There is a shifting reality here. The story was real to them during the reading. It was identifiable, reproducible, and enjoyed as a concrete, shared experience. (infra:585). Now, paradoxically, this artificial man-made scene, confirms that the trumpeter swan is real. It exists. It conforms to the descriptions in the story. It is the trumpter swan! And yet, they know it is not.

How can this be? How can a disembowelled, sterilized, stuffed bird's skin, mounted on acrylic water and framed in diorama, trigger within the children the illusion of reality? Because it is an illusion. The not-real has taken on the mask of reality and the children offer no resistance to the slight-of-vision. They willingly "see" the dead bird as a real trumpeter swan. They will go home and tell their parents and brothers and sisters that they saw a trumpeter swan. They will not even have to explain that it was not a real one; everyone will understand. They will immediately transfer the reality of life onto the fiction of life portrayed in the museum. They will make the shift unconsciously and, further, they will understand one another. The context of the children's visit to the museum presets their expectations and their anticipatory readiness to see, hear, and understand within that context. The listeners of their tale will also accept the reality of the taxidermy as the reality of living birds.

The magnificently preserved husk of the swan is now an object that creates a fiction. In a twist of suspended disbelief, it becomes more than a mere object. The object becomes a signifier, a form onto which is superimposed a new understanding. What is signified is the image of the trumpeter swan, alive and thriving in the marshland. The signification is that nature continues; somewhere, there is a trumpeter swan with a nest of viable eggs at its feet. Somewhere, a grasshopper clings to a blade of reed in the same prairie slough. Somewhere, all these signs are something else; something that _is_ real. That what the children see in front of them is _not_ real is simply suspended. In their eyes, the static scene has become real: they hear the lapping of the water, the cry of the hatchlings, and the rustle of the wind through the reeds. What they see before their eyes is transformed in their minds into that which is life. The transformation is spontaneous and unerring. The sign is life manifest.

In this artifactual display is also a metaphor for knowing, for pedagogy. For very little of what the teacher brings to the children is real in a living, time-changing sense. While the experience of talking about the meaning of a poem is a real experience as a pedagogical exchange, it is a verbal experience. The children are not now walking along the beach, wiggling their toes in the sand or wondering now, in the act and moment of standing in the sand, about the origins of those silicia crystals and expressing this experience in their own language. They are, instead, reading a poet's interpretation of his experience or his imagined experience.

In their social studies, the children are not the pioneers' children helping in the fields: they are reading about other children having that experience in another time and place. In mathematics, they are not the ones measuring lumber in metric for a treehouse. They are merely doing the calculation for the fictitious children illustrated in the text. The children, in all these cases and typically in the vast majority of their studies, are asked to consider what might be called archival information and circumstances. It is the past that is made accessible for their consideration. Their present is bound in the representation of others' experience or in abstract non-experiential calculations. As they were at the museum, they are viewers of others' experiences, from which their own understanding arises. One might well question the effectiveness of a continual referral to a remoteness-of-experience when contrasted with learning that occurs in a participatory idea-exploring and decision-making context.

Although it is evident that not all learning can occur as a first-hand experience, the excitement with which the children greet the trumpeter swan diorama reinforces, once more, the potency of extending the printed or exclusively verbal experiences so typical of classroom pedagogy. The diorama's proximity in size and naturalistic contours enhances its reality-index, but this type of approximation is perhaps more fortitous than necessary. Children can enact "life" with finger puppets, miniature toys, or sticks and twigs, and in any empty space. Mentally, they can recreate reality and give it life through their own eyes.

They can do this through words too, if the linkage is made with them and for them, and if we listen and respond to what they spontaneously say and do. The edge of a page on a child's desk is only the edge of a page. It should not function as the boundary dividing the text from life but rather invite the mind to seek just such interconnections. Their teacher is a critical catalyst in how the archival experience depicted in curriculum and learning resources is translated into the child's life. In more way than one, the teacher becomes, for the child, a sign-maker, a life-maker.

To take the analogy of diorama and pedagogy one step further into an analogy of school and society: children live in the context of the classroom as a signifier of the larger society in which they live. They never question the discrepancies between what occurs within the classroom and what occurs within their lives outside of the classroom. They express an implicit faith that what they learn in the classroom, somehow and mysteriously, (for they cannot make the linkage explicit), will allow them membership in the world, when they have completed their schooling. Their comments about the value of school is almost invariably rooted in the future: "When I finish school...", "So I can get a job...", "When I grow up...". Just as they see the trumpeter swan in the museum as real, they see their lives in school as real. But, ironically and in the same way, they see their lives suspended in time. The realness of their lives is not seen as what is happening to them now, but more as preparation for what they will experience later. Surely this very deferment of the sense-of-living denies them the full pleasure and value of the experiences of the moment.

This is not to say that they do not experience in the present tense but rather that they are intellectually as suspended in time as the trumpeter swan is suspended in acrylic and artificial lighting. Implicitly, they are waiting for the real to happen...later. For many, unless they begin to make these linkages now, they never will happen. They will remain spectators to life, caught in the fiction of videos, television, computers, popular magazines, and their own dreams. If children are to become sign-makers rather that perpetual sign-readers, they must continue their first playfulness with the world, not put it aside.

But there is more to be learned from the children on this visit to the Museum. In the following conversations, we hear their willingness and eagerness, even yearning, to give life to what they see and experience, to make it a part of their lives, to make it a sign that is meaningful.

[What did you think of the visit to the museum?]

> Nancy: Mmm?...

[Why?]

> Sarah: The only thing that wasn't good was pemmican!...Yuhh!

[Did that spoil the whole trip?]

> Nancy: No!

[So, what did you like?]

> Bonnie: The drum!
>
> Nancy: The teepee!
>
> Sarah: No! It looked like the people were real. They were staring at you.
>
> Cindy: I like the horse with the tribe.
>
> Bonnie: Yeah! But the only thing was: I wanted to go in there and pet him.

Here we have another example of the shifting acceptance of static objects--of unreality--into people seen as real and capable of "staring at you", or into a horse that would be, could be, responsive to petting. Onto the object, the image of real life is superimposed, removed, and reimposed. The children know the people and the horse are not real, and yet they are reluctant to deprive them of life. In their minds, they re-create them into living beings. Such is the power of the sign. It stands for something else with such dominance that it becomes that person, animal, or thing. Its very physicality transposes object-image-life in an endless shuttle that endows and deprives in a relentless juxtaposition of reality and illusion, rationality and imagination, of being and non-being, and of simultaneously existing as spectator and participant.

In the touch of the child's hand on the dead, dried, sanitized, and mounted horse's skin is the power to recreate a nuzzling, snorting, whinnying, living animal; in the glassy stare of the Indian mannequins, the possibility of life. In this very possibility is a richer, more meaningful relationship than can ever be found in the printed word or even in the visual movements of a film. Those forms are closed; their strength is in the boundaries that they create. They specify color, movement, dialogue, and relationships. The mannequins, in not speaking, suggest that all is possible. There is no limit to what might be said, to what might be exchanged between child and mannequin.

Paradoxically, that ultimate exchange rarely occurs. The children have put away childish things. Once they talked to dolls, to carved wooden branches, to stuffed toys and imaginary friends. They created a world of reality enveloped in that illusion. What might not be gained by allowing children unabashedly to converse with the mannequins?

Behind the most amateurish puppet, the child's hand recreates life and, in a deluge of accents and intonations, recreates the language and world of the character. Grade one children excitedly line up in their groups, holding their brown paper bag puppets, waiting to tell their story, (The Three Bears, Jack in the Beanstalk, and This is the House That Jack Built), They will tell these stories in their own words and in their own way. They shush one another as the first group takes its place behind the cardboard screen, once a carton for laundry detergent boxes. It doesn't matter that the puppets are humble or that the stage is makeshift. Between their giggles, they recreate the story, and we who watch see the forest and the cottage, the castle and the giant, and the ramshackled house that Jack builds. We, too, go willingly into that world.

Eight grade-five children are standing at front of the classroom. Colin is holding a model of the St. Lawrence Seaway, a series of locks that allows ships to move from the River through to distribution points along the Great Lakes. Colin is the chief designer. He built the model from diagrams in a text. He introduces his assistants. Terry explains the historical background of the creation of the Seaway. Pretending he is Captain, Bill navigates his toy ship through the locks as he explains how they work. As the children speak, various children slowly get out of their desks and quietly move forward to see the details better. Soon everyone is gathered close, listening and learning.

Maureen continues with statistics and descriptions of tonnage passing through the locks. Debra completes the presentation with projections of the needs and future challenges facing the St. Lawrence Seaway. Then she thanks Brad and Stephen who had gone to the central public library to get reference materials not available in the school or community library. Calling on their broad reading, the boys respond to questions from the children. In all of this, a significant pedagogical experience has occurred.

What is it we lose when, as educators, we limit the function of objects and signs to conventional behaviors, depriving children of the opportunity to touch, to talk to, to recreate with inanimate objects that very illusion of life that they so spontaneously demonstrate in unbridled conversations outside the context of formal learning? The brown bag puppet or the meticulously crafted seaway model become pivotal signs through which experience, knowledge, and creativity are conveyed. For the one who explains and for those who listen, this single object soon signifies an entire conceptual world. Without its semiotic focus, less of that world is experienced; less of that knowledge is understood.

If school is to be a continuation and extension of the child's natural curiosity about his world, then the school has an implicit commitment to incorporate in its repertoire those opportunities that allow the child to move more naturally into the abstract world of ideas. Bonnie praises a previous teacher for allowing her children frequent opportunities to dramatize the stories, and points out that boredom may be closely related to a child's enforced detachment from the learning process:

> My grade three teacher let us "act" stuff out when we were reading. I used to think it was boring for teachers to read out of books. You know, those books you read. You all sit in a circle and you start reading out loud. You... it's confusing...you... It's more exciting to see people acting out instead of just sitting there waiting to read. You try to do your best. You try to do your best in everything if you want to pass that grade and my grade three teacher let us get up and do things, like acting and everything.

The same teacher created the highlight of an Open House held at the school several years earlier. Her class of the eight-year olds recreated a morning in a 1900's classroom. The scene was complete with schoolmarm, dunce cap and corner stool, spinning globe, feather duster, a frozen water pail in the cloakroom, and a surprise visit from the district school inspector. But the value of the experience for the children lay not so much in this dramatization of school history (as books record the details of such events) but in the fact that it was but a culmination of many such experiences, less grand but no less valuable: linking sign to life and translating life into signs for others to understand and enjoy.

But if this approach be construed as too onerous an undertaking for the daily life of a classroom, Danny tells us that the experience need not be an elaborate one. Rather it must be allowed to occur frequently and naturally, not as something contrived as "special" or "important" but as part of living, of being and becoming.

> [Tell me the thing that most impressed you at the museum.]
>
> > Danny: I think the spyglass was really neat. I looked in it. It was really sneaky. You could put your head right in there and turn your head around and around.
>
> [What did you see when you looked in?]
>
> > How the archeologist finds his stuff. That they get for the museum... I liked the place where we got to touch the hides and stuff... It was really different.
> >
> > Usually, you don't get to use stuff like that, to touch stuff like that. We got the privilege to really feel it and get to know what it felt like.
>
> [Was that better than looking at it on a display table?]
>
> > Yeah!

It is poignant that so simple a gesture--touching the hide of a buffalo or beaver--is seen as a privilege, a rarity in a child's life. Our distancing of the child from his world betrays his natural instincts to explore the world through the totality of his alive and searching senses. What the museum can do so well: providing the artifacts and models that can be handled and examined, the school can do as well. But only if it is not timid in its approach to life, only if it does not remove the vital core of life from the child's world.

If this distancing of child-from-life is thought to be the avenue to intellectual growth, it is a misplaced understanding of how children learn and of how they want to learn.

[May I ask you how you enjoyed the museum trip?]

> Carmen: Well, it was kind of boring. It's not very entertaining.

[What would be entertaining?]

> Well, things that move around. You see these things and they are just...straight. They can't move around.

[You mean all the display set-ups?]

> Yeah!

[How did you like the part where you could feel things as they were passed around?]

> Oh, I liked that!

[Why is that a good way to learn? Why did you like it better?]

> Because you could feel the things and you could get more detail out of it.

[Oh, that's a good point. No one has said that before.]

> Because you can feel what it feels like, and when it is in the glass case, you can't do any of that. So when you can feel things, it gives you a better picture of what it is.

[Of all the things you felt then, what were you most interested in? What did you hold on to the longest?]

Oh, I liked the buffalo hide! No, the buckskin!

[Did you check both sides of it?

Yeah! One side had a lot of stuff on it and the other side was a little flatter. It was so soft! But I didn't like the feeling of the buffalo hide at all!

[So what did you think of the visit?]

Bonnie: When we got to feel the buffalo hide! I really like that!

Cindy: We got to taste pemmican! And it was gross!

[Some people liked it. Why you didn't like it]?

There was something in it that was a rock or something.

Paul: No. That was berries.

Bonnie: It had spices in it that I don't like.

[I think that was just the natural juice from the berries. The mixture of the meat and the berries and the animal fat.]

Animal fat!?

[Yes, to hold it together. When your mother bakes a cake, she puts in some butter or margarine or some oil to hold it together. Otherwise, it would be all powder.]

Well, it wasn't very good!

***

Cindy: Mrs. McKie, did you have a taste of pemmican?

[No. I wanted too, but there were lots of kids and the lady wasn't letting too much of it get away. So I didn't have a chance. But I watched a lot of faces and saw a lot of noses wrinkle up.]

> {Everyone laughs}
>
> Bonnie: Well, I'll tell you: Don't try it!

[Then why did you try it?]

> Well, my friend said it was good and she usually has good taste...but when I tried it, ooogh! It just upset my stomach.

[So you would take your friend's word for it?]

> Yeah. But I shouldn't have! {giggles}

While many children had very positive or very negative reactions to the activities they participated in during the day, Cindy clarifies the difference between an non-participatory experience and a participating one:

[Did you like the trip to the museum today?]

> Cindy: Yeah...you got to see how much stuff there is in the museum and how the Indians used this stuff.

[You said: You got to see. Is seeing it for "real", good?]

> Yeah!

[You saw some films about Indian life today too. Why is this better?]

> Bonnie: Well, instead of writing notes, you get to learn it in your head instead of reading in the book or something... And you learn more. You get to really feel what it is. And even if it is gross, you learn better.

> [Is that different than your teacher telling you how it is made?]
>
> > I think it is better when you are right there and learning it.

This merits repeating: "You get to learn it in your head. You get to really feel it." Cindy is not just talking about memorization or the tactile sense of feeling an object. She is saying that when information is "in your head", it becomes a part of you. It is no longer just part of a book. When you "feel" it, you have absorbed that knowledge into your body as a sensation of learning. Now the body knows. The mind knows. As Bonnie says, "It is better when you are right there and learning it." You are present as an interacting individual. You are, in your oneness, responding to a sign that in itself means something else. In this curious symbiosis, there is a moment when you know. For the child, it is a discernible moment. "You learn more." "You learn better."

To summarize, in semiotic terms, the child understands more of the designatum of the sign (whatever it may be), more of its nuances and its context. Simultaneously, the sign's triadic nature (sign-object-interpretant) becomes for the child, its significiation: its conventional meaning and its new and enriched meaning. This extended meaning is now an integral part of the designatum of the sign that the child brings to it. This aura of meaning that the sign now carries is greater than it was in the child's initial encounter with it. Each subsequent experience with the sign is similarly enriched as meanings accumulate for the child and as more and more life-experiences are brought into play in the creation of that meaning.

Nor are adults immune from this experience. No one is. The field experience at the museum was a discernible moment for me as well. Indeed, it was a collection of many and valued discernible moments.

> Bonnie: Mrs. McKie? What did _you_ like best at the museum?
>
> [I think I liked that touch-and-feel cupboard best too. But do you know why I liked it? Because I was watching all of you. You were all concentrating so hard and were so interested. Watching you learn made it especially interesting for me.

In the brief comments that the children make, they tell us that the intangible and abstract world of books is not enough. They are telling us that direct-interacting (even with dead objects and ancient artifacts) is a rich and valuable learning experience. For example, anyone who has ever watched children with a pet brought into the classroom knows how exhilarating that experience is for them. While admittedly, it is not easy to bring life in all its forms into the classroom, surely there are many possibilities that might be explored. The sign has meaning only when the form it takes derives its sense from a linkage with life. I would charge that there is a masterful deprivation of such linkage in elementary classrooms.

But field experiences, in and of themselves, are not a guarantee that learning has been secured. Valuable as they are, there too learning can be incomplete, imperfect, even erroneous. They do however bring a reality to the children that cannot easily be duplicated in the classroom. But lessons outside the classroom as well as those within need the attentiveness of the teacher to reinforce, strengthen, clarify, correct, confirm, extend, and enhance the children's learning. As the following example shows, a teacher can nudges knowledge into a clearer perspective by taking up the threads of what the children have newly-experienced and drawing them together with the children's previous life-experience. (The same "binding" occurred in an earlier conversation with the children about pemmican and the inclusion of animal fat.)

> [How did you like the Christmas display?]
>
> > Cindy: I like the player-piano best.
> >
> > Bonnie: Yeah, it was nice! It plays the same notes that you play on the piano.
>
> [Did you understand how it works?]
>
> > Cindy: Yeah. The lady that took us around, she explained it to us and that makes it interesting. Then she played the piano.
>
> [But she didn't play the piano.Her hands were holding the wood above the keys.]
>
> > Bonnie: Oh yeah, she pumped it with her feet and then the computer worked it.
>
> [Right! It is a very old type of computer. The paper with the holes in it, catching on the hammers of the piano. Have you seen the inside of a music box?... No?... Well, the player-piano has a lot of

> steel pieces and as the holes in the paper
> come by, it trips them and they make a sound.
> There is a wire for each note.
>
> Bonnie: And it makes the piano play!

There is no assurance even now that the children understand, but they have another piece of information to put toward an unending search for a totality of knowledge and understanding. The elaboration of the experiences at the Museum offers a description of a pedagogical possibility. Given all the advantages that the museum staff bring to the presentations they are able to make, the experiences are rich and varied. From the children's reactions to these presentations come important implications for the classroom.

It is acknowledged that many teachers do provide interesting and textured depth and variety in their classroom activities. They free the children to participate fully in their experiences, to create and implicitly evaluate them, to translate life into sign, and to link new signs with new experiences. Too frequently however exhibits, pictures, models, filmstrips, and books all contain the kernels of this linkage, but are only displayed and shown--at once in the presence of the children yet removed from them as if in sealed, transparent time-capsules. Their use is orchestrated by the teacher rather than fully experienced by the children.

But teachers sensitive to how children learn do open the doors to direct exploration through the senses and through language. They create the possibility of learning and, as Danny says, the privilege of learning is placed in the children's hands. They allow children room and time to explore and experiment with tentative ideas. They do not demand precipitously the consolidation of these ideas until the children (each in his or her own time and way) are ready to do so. Where the result of learning is predetermined by the teacher, there is little significant learning achieved. Where it is open-ended and the children has time, space, and opportunity to create and recreate understanding in the context of that learning, much can be achieved.

When learning is seen semiotically as multiple explorations into the diversity of signifiers rather than as arbitrary limitation of signs (and associated experiences), a new perspective is added which infinitely enrichs that learning. The rewards are greater possibilities: vista are broader; pathways become more exciting; destinations are tentative and amiable to change as new insights and experiences are accumulated. Learning becomes an exploration rather than a predestination.It becomes a creative experience for the teacher as well as the children, ever-expanding in its potentiality. Teacher and children then thrive as sign-makers in an endless and exhilarating experience of learning.

The Elementary School Libraries as Semiotic Centres

> ...to touch the imagination...
> ...to introduce exempla...
>
> (Eco 1983:79)

September is a particularly busy month in the school year but one of the first things established, after the classes have been settled, is the opening of the school library. Both teachers and children realize that however excellent the classroom library may be other resources are needed for academic studies and pleasure reading. In most schools, the library is one of the most attractive areas. Here the choice and arrangement of furnishings, shelves and books, potted plants for decoration and screening purposes, reading carrels and inviting round tables and chairs, imaginative bulletin displays, special interest centres, and the librarian's work area are all coordinated to make the best use of space and to highlight the value of books and learning resources.

> The sign of the beautiful implies peace...
> how pleasant it must be to work in that
> place."
>
> (ibid.:72)

A large community library is the repository of mankind's achievement in art, literature, music, science, social endeavours, and technology. The school library is a miniature replication adapted to the particular needs of children. It may be seen as an important sign, from a society to its children, that what is held in trust here is marked with deference, that the society from which the children come gives financial and spiritual support to a library's creation and preservation. It is both a sign and an enclave of sign--signs in the form of books, maps, diagrams, charts, videos, audiotapes, films, artifact displays, pictures, magazines, pamphlets, booklets of children's writing and artwork, and, increasingly, computers. The library's very existence is symbolic of society's attempt to preserve knowledge and nurture its pursuit. The school library is an extension of classroom life, a bridge between the child and the world.

The library is one of the largest areas in the school (other than the gymnasium) and, consequently, accommodates meetings with children, teachers, parents, members of the community, and administrators. However, it is more than convenience that draws them here. It is here that important interactions occur, in pleasant and learned surroundings, in this implicitly symbolic space within the school. It is here that children's art, writing, and achievements are displayed and given public recognition. It is here too that classes assemble to share a story, film, puppet show, or mime. It is in this space that the semiotics of being are centred--in a communal space that encloses both tangible objects as evidence of civilization's progress and the intangible aura of appreciation. If there is a pedagogical centre in a school, it is the library.

During the first week of September, Mrs. Wayne's comments very clearly convey to her class just how important she believes the school library to be and how together teachers and children are custodians of its treasures.

> Mrs. Wayne: Our library is full of very expensive books. They are precious books. Many are beautiful books that are difficult to get even if you have the money. Our librarian said that, at last count, we have lost over five thousand dollars worth of books. That's a lot of books!
>
> So it is very important to me for you to remember the day that is your library day. That you have your books and you take them back. If you forget your books, you go into the library doghouse. [An attractive laminated teacher-drawn picture of a doghouse.]
>
> Now the library doghouse isn't really a place for punishment. It is a place for reminding you that you are to bring your books back, whether it is the next day or two days later. Then you erase your name from the doghouse. But we really try hard to get those books back. We are given a week's grace, so if you get them in by the next week, we will still get a school Good Guy Award for our class.
>
> If you forget your books, come and tell me, "Please put my name in the library doghouse so I will remember." And if you are very forgetful about your books....I had one boy who constantly couldn't remember! I'd put him in the doghouse and he would still forget. So he made arrangements with another boy in the room who would phone him at noon on library days and say, "Remember your library books." His friend only had to do that a few times and from then on he remembered by himself. I hope you will all remember.

It is interesting to note that the library's repository role is emphasized. The books are to be borrowed. They remain communal property to be used freely, but under clearly understood restrictions. For young children, it may well be that the school library is the first social agency they experience as independent responsible citizens. Using the school library (for some children, their first encounter with libraries) is obviously a learning process, but with help from their teacher, their friends, the doghouse poster or some other tangible reminder, and from the librarian in the role of story-teller, book-finder, fact-searcher, and friend, the experience should be a continuously successful one.

But the library is more than a repository. It is a semiotic centre. It is here that a multiplicity of sign systems co-exist and complement one another. First, there are signs that can be identified as spatial semiotics--the arrangement of space in a pattern of discrete areas that serve specific purposes. There is the reference area, the picture-books section, and according to the Dewey system commonly used, the science, travel, fiction, non-fiction, history, and literature sections. There is a space for the young readers, for the older ones, for the ones doing research and for the ones reading for pleasure, for children and for adults. There are accessible spaces and implicitly out-of-bounds spaces. There is space governed by time, space which is set aside for those who request its use. There is the encompassing space around the library that governs behavior as people approach it. There is space that takes on a different quality reflecting what is occurring there, e.g., a class busily searching for specific information or an intimate story-telling in the story-corner. There is a space for browsing, a corridor of movement that is separate from the study areas where movement is more discrete. There is, broadly speaking, organizational and proprietary semiotic space.

All these spatial contexts are governed by conventions of behavior that are considered to be appropriate in this space. These conventions are frequently stated as rules, courtesies, or expectations. Although many are implicit to that space, children are expected to learn what is acceptable in each space and what is not. This they do by following the example of those who seem to know the spatial semiotics and move freely around the entire area. One need only become aware of the sense of unfamiliarity that arises in strange surroundings to realize that knowledge of spatial semiotics is a barrier to be overcome. For young children, this is no less so. Specific semiotic learning is involved: an orientation-of-self to the geographic area in which one will move. The spatial semiotics of the library then may be considered as an example of the type of orientation that the child will need in other areas of the school. The washrooms, the gymnasium, the office, the nurse's room, the hallways, the art and music rooms, the playground, and the classroom, all carry discrete spatial semiotics--conventions that designate one as belonging to this particular community of learners or as a stranger. Until that strangeness is overcome, the child cannot be "at home" in the school. Until that sense of surety comes about, one might speculate that a child's full attention cannot be given to the pedagogical tasks at hand. Finding one's place in the semiotic scheme of things is fundamental to learning.

Discussion of the school library also allows us to see it as a prototype for yet another semiotic base--contextual semiotics. This involves all the sign-systems used in the library that organize the placement of materials and resources and the sign-systems used specifically within these materials and resources. There is the numerical coding of the system used to classify books, and the alphabetical coding that occurs within that classification. Within the books and resources themselves are coding systems such as table of contents, indexes, glossaries, legends, etc.

There are also specialized coding patterns found in cartography, topography, music notation, pronunciation keys, scientific formulae, mathematical symbols, numismatics, etymologies, learning resources referencing codes, chronology, and encyclopaedic cross-referencing. For the elementary child, becoming familiar with the complexities of resource location and the specifying codes begins with the semiotics of taking out a library book: signing for it in whatever code has been established as identifying the borrower. A glance through the library card files shows clearly the struggle some children have in printing name and room number in the small space allotted on the card. Watching the librarian patiently showing child after child how to use the index cards (and each child time and time again), points out that there is a semiotic mystery that the child must overcome. Watching adults struggle with the microfiche at the public library draws the same empathy. Even university students, using computer terminals, may give up and return to using the microfiche or card index with which they are more familiar. Until a code is understood, there is no independent access to the wealth of resources that a library holds.

The complexity of the contextual semiotics of a library is pervasive and its mastery is presumed more often than it is fully achieved. It may be that a child's indifference or reluctance to use the resources of a library has a great deal to do with an inability to break the code behind which the information hides. Codes and the symbolic messages they communicate must be learned (Eco 1983:43). It is accepted that learning to speak a language (especially the first one) is a process that requires time and patience but primarily practice and interaction with people and with the language. It is not usually understood that a child needs the same considerations in learning to use and enjoy the library. Single lessons, such as finding a book on seahorses, tracing the meaning and language of origin of "kerosene", or locating an author's biography or a title whose author is unknown, are no more than that: single experiences rather than a mastery of the semiotics of a library.

Edmonton Public School 1982 city-wide tests for elementary children in gifted programs showed that skills in locating information scored the lowest of all categories of reading-related skills. If accessing information is accepted as an important if not critical part of a student's repertoire, then the semiotics of a library must be taught.

The importance of the school library as a prototype of other community information centres takes on new significance when it is seen as a semiotic-centre designed to teach children to independently find and use resources in their search for knowledge. The school library is simultaneously space and content and until its semiotics are understood, it will continue to be undervalued and underused. The kindergarten child coming into the school library learns to identify a given space with the picture-books he enjoys. For older children, spatial orientation is only the beginning. Yet many attain no greater sophistication than that. While browsing is a time-honoured practice that can reap surprising dividends, it is not enough for the child who wants and needs specific information. Bringing classes into the library is only a beginning. Pedagogical responsibility must continue there with the full realization that the library is by example, content, and opportunity the semiotic centre of the school.

But it is necessary to carry this argument into the classroom. The relative remoteness of the school library with its controlled access (classroom visitation schedules and operating hours) gives the classroom library particular importance. Here, books are more accessible and form an inherent part of the learning environment. Early in the year, Mrs. Wayne, standing in the reading corner at the back of the room, points to an attractive bookcase and explains:

> As well as the school library, we have a classroom library. You see, this is full of books. A lot of the books are quite difficult. A lot are at the grade five and six level because I have taught those grades before and have bought a lot of these. You are at all times to have a free reading book at your desk because every day after we have reading with me here in our reading corner, you have reading by yourself at your desks.
>
> You have U.S.S.R. You know what that means: Uninterrupted, sustained, silent reading. Good. It is a chance for everyone to take out a favorite book and read for about ten minutes. On library days, usually fifteen minutes. These books are to be kept in your desk.
>
> If you get involved in a book and you really desperately want to take it home, you can. I've set up a borrowing system for our classroom library. All right? I know what it is like when you are in the middle of a book, you hate to put it down. You want to see what

> happens. In that case, you are welcome to take them home. But I have to keep very close track of the books. Because I bought most of those myself and I can't afford to replace the ones that might get lost.
>
> Brian: You must be rich!
>
> Well, you know how we order books. A lot of those came as a bonus. Which means when my class ordered books for themselves, I got one book free for every ten they ordered. So if they ordered fifty books, how many would I get?
>
> Tony: Five.
>
> Five free ones. If there were sixty books, how many would I get?
>
> Chorus: Six free ones!
>
> I usually order some too, so you can see how I did build up the library.

In considering Mrs. Wayne's conversation, it is evident that she places a high value on books both as a financial investment and as a source of pleasure and information. While books are obviously provided by the school, many children willingly purchase them as well. Their teacher's example in this is apparent. The orientation comments lean heavily on the monetary implications of having and losing books. Little mention of this was heard subsequently.

But there is something important implied here. Indeed, as Brian's comment suggests, "You must be rich!" In that exclamation, he encapsulates the history of libraries as a privilege of the wealthy, whether owned or used by the state, the church or by individuals. Ironically, this is no less true in contemporary society. For it is in wealthy countries that the greatest libraries are found, in the wealthy cities, and in the wealthiest schools.

With the advent of school-based budgets, the proportion of monies spent on the school library is all the more indicative of the value placed on its services in comparison with other support systems. Paradoxically, schools in less affluent areas are more likely to have greater need for those other services (school counsellors, lunch programs, and after school-care). Consequently, they may have less monies to allot to their library programs.

While Alberta is estimated to have the third highest per captia income in Canada (Harris 1984), its public library expenditure per captia in 1979 was among the lowest. Since then, there have been significant and proportional increases in this allotment (Forsyth 1985). In January 1985, in an attempt to equalize the accessibility of learning resources throughout the Province, Alberta Education announced a special library grant to every school. There appears to be a strong symbolic relationship between monies a society spends on its libraries and the value it places on their services. Further, library expenditures may be seen as symbolic of the value a society places on the pursuit of knowledge, on its young and, ultimately, on its future. Brian, the nine-year old boy, is right. But only in part. Yes, you must be rich to buy so many books. But you must also want to make them available and this in turn tells others a great deal about who you are and what you believe in.

The teacher's role in promoting a respect for libraries is an important link between the broader community and the school child. That support can be negligible or (as it is in this case) outstanding. During an interview in November, Mrs. Wayne responds to my question:

> [Why are you teaching the children to use the library when there are video tapes available at home, when there are so many families with access to computers? Aren't you looking at a generation that isn't going to read?]
>
> Mrs Wayne: (softly) I hope not.
>
> [You're so solemn!]
>
> {Both laugh}
>
> I can't imagine anyone not wanting to read. I mean, you can't take a video tape with you in the car when you're on a holiday or out on the beach.
>
> [But aren't you flogging a dead horse?]
>
> The reading?... I don't think so. There is so much in books! I can't imagine them not... They have to... They can't... live without books! {laughs at her own urgency}
>
> [I think as much as anything it's your attitude toward the question. Your intensity! All this would have to influence your kids!]
>
> I sure hope so! I think it does too, because I do push books and I always have the biggest book orders. I make such a big deal over it and they are always reading. Even just having

> all those books {pointing to the classroom library shelves}... Those are all mine. I must have two or three hundred of them there. They're there mostly to get the kids interested, so they will all want to read.
>
> Once I was reading The Lion, the Witch and Wardrobe to my class in the library and one of the resource children was there. She just stopped and stood there. Next thing we knew, she asked the librarian for the book and she was just glued to it until she finished it.
>
> The other day, the librarian said: I bet you are reading The Narnia Chronicles to your class. Because every book in that series is out of the library! If you take any of the sign-out cards and look at them, it says "Room Twelve"...different years, but it's all my kids reading them. All of them have read them. Now they all want to read The Island of the Blue Dolphin after I read it in class.

Such is the power of the sign of a teacher who is a reader, a story-reader, and a supporter of the library. Its value cannot be underestimated for it is critical in the pedagogical relationship between teacher and children. Teachers who enjoy reading and extending their personal knowledge are dynamic models for the children, especially when compared to those who shun or minimize such activities. In her attitude and actions, Mrs. Wayne exemplifies an enthusiastic search for knowledge and a finely-honed appreciation of literature and creative capacity. Such a teacher helps the child travel the walkways from the familiar to the new and exciting and, perhaps, even like Peter Pan, fly beyond.

This does not mean that only those children who are avid readers and proficient report-writers benefit from the resources a library offers. Any child who is curious (in whatever) may find information, direction, and inspiration. The classroom library and the school library form the children's immediate bridge from their own world and to worlds beyond. As children move into ever-increasing semiotic competence, their access to knowledge becomes infinite.

A child's access to a book, a filmstrip, a record, video disk or audiotape is only the beginning but a crucial one. The semiotic impact of libraries on pedagogical inquiry must not be overlooked. While the content and form of the library may change as technology changes, its inherent semiotic function will always remain--to preserve and distribute the sign systems that embody one person's thought to another, to make accessible civilization's achievements, and to involve others in that search. A child's affinity for the library and its riches begins, if not in the home, then certainly in our schools.

***

The Significance of Spatial Semiotics of the Classroom

The semiotics of the space and objects of a typical elementary classroom cannot be described in the sophisticated terminology of architecture as might be found in Preziosi (1979,1984), or in Lindsey and Sakellaridou's analysis (1983) of the Museum of Anthropology situated on the campus of the University of British Columbia. The classroom lacks the permanency and deliberate manipulation of space that is characterized by other public buildings. Each teacher and each group of children defines that space and the meaning it is to carry. It is a meaning that is fixed only in part. Much of it changes from day to day as new priorities predominate and new pedagogical explorations are undertaken. However, there are important implications to be derived from considering space as one of the influencial aspects of total classroom ambience. In the discussion of the spatial semiotics of an educational setting, the emphasis is not on the structural creation of space as much as on the meaning teacher and children attribute to that space during their ongoing pedagogical relationships.

The classroom itself is a symbolic space, endowed with society's hopes and expectations. It is a space held in trust where the knowledge and values held by society are gradually introduced to its children and where the skills of learning are imparted to its future citizens. More simply, it is the space in which teachers and children live and learn. While much of the classroom environment is given--its area, shape and contours, the placement of windows and blackboards, the desks and support equipment that is required--how that space is arranged and what is placed within it becomes signficant because of its semiotic nature. It is what gives a distinctive aura of meaning to that classroom.

Within that classroom, the children's desks, the teacher's desk and work areas, the classroom decor and objects placed within it, all take on and emanate meaning as indices, icons, and symbols that reflect interpersonal relationships, philosophical priorities, educational goals and objectives, curricular requirements, and personal preferences. Directly or symbolically, all these features may be "read" as a particular code that encourages, allows or inhibits certain attitudes and behaviors, that values or negates children's needs and priorities, or that recognizes or censures particular acts and attributes.

The semiotic nature of the classroom has a particularly important impact on the children's attitude toward learning. They may be considered it to be the only place where learning is possible. By its discrete signs and intricate sign systems, by its spatial emphasis, the classroom may invite a continual relationship with the world beyond its walls. It may be semiotically open, reaching from itself into the world and drawing the world into itself. Or, its space may be defined as closed to all external references and limited only to those resources that can be contained within it. Clearly, the spatial semiotics of a classroom may recognize the extended world of the child or ignore it. What is important is that, whatever implicit message the classroom conveys by its use and recognition of space, that message is not lost on the children.

The degree to which classroom, school, and public libraries are utilized and valued, and the degree to which status is accorded the lessons conducted outside the classroom is critical in creating for the child a linkage that gives meaning and importance to the flux of life outside the classroom. By their broad and broadening semiotic horizons, these experiences highlight for the child the continuum of past, present, and future, and help to make the child a vital participant in the decisions of that change and development.

While in their totality the semiotics of interpersonal relationships and the semiotics of pedagogy are critical to the success of the children's educational progress, spatial semiotics create the setting in which this is to occur. As the stage of a theatre awaits its players, each day the classroom awaits its teacher and children. It, too, is a scene telling the children where they are, who they are, and what will be possible within that space. As the play progresses, so does the school year, and the action there is governed, at least in part, by what the space offers and by what meaning is taken from and given to it.

Semiotics of Interpersonal Relationships in a Pedagogical Setting

While it is possible to learn without an interactive relationship with a teacher and to teach without an interactive relationship with the learner, a certain sterility is suggested by such objectified pedagogy. Presumably, in such a setting, the subject matter or content takes precedence over the persons involved and pedagogy becomes a unidirectional exercise, e.g., the giving of information, as opposed to a developing of understanding in synchrony with another's thoughts and language. While this approach may be inevitable in correspondence courses, television-based instruction or in many lecture-formats, it is not generally accepted as appropriate for the education of children. While a part of our history of education includes an era when passivity and obedience were demanded and children were held in an exclusively recepient pose, methodology has changed with the changing concept of childhood and children.

Instead of being commanded to act or think without question in predetermined ways, children were gradually recognized as having distinctive rights as human beings. As they were allowed to become more vocal in expressing their needs, thoughts, and desires, it was inevitable that the communication between the children and their teachers increased significantly.

Pedagogy is accepted as an interactive relationship in which there is a continual interchange of ideas between the teacher and the children. In semiotic terms, there is a lively creation of signifiers and signified because of the mutual involvement, interest, and activity of both teacher and learner(s). The meaning or signification of that exchange takes its form from what they each bring to the pedagogical experience--their unique designatum. There is an implicit reciprocity, a semiotic interpretation between them, a giving and receiving, a returning and consideration, and a modification, rejection, acceptance, or extension of the ideas presented.

There is a circularity of meaning as the teacher "reads" the semiotics of the children's understanding (or lack of it) and responds to these signs with pedagogical refinements. In turn, children "read" the semiotics of the teacher's being with them. While much of this relationship is governed by pedagogical necessity (i.e., the content or skills to be developed), much also depends on the respect and understanding that they hold for one another. Pedagogy depends on who and what people are, as much as on what they are to be learning.

In most schools, pedagogy is done "in person", where miniscule moment-to-moment understanding affects the next moment of explication. As is shown in the "Semiotics of Specific Pedagogy" (infra.:480), each lesson has a distinctive semiotic quality of its own. As the teacher moves from one secured understanding to another, her next pedagogical move is cued by the children's responsiveness and behavior. She "takes" as many children as possible "with her" into the next understanding or into the next skill. In part, the success of that pedagogical approach hinges on the semiotic impression of self that children and teacher give to and receive from one another. This self-and-other assimilation on a persona level is here termed the "semiotics of interpersonal relationships".

The semiotics of pedagogical relationships is discussed from two points of view: the children's and the teacher's. e.g., How do children "see" themselves as learners, and how do they "see" their teacher as teacher? What does it mean for a child to be a semiotic being in the classroom? How does he interpret the words and actions of his teacher? How does the teacher "see" the children as individuals and as a class? By what signs do they know each other? The answers are of course extremely complex and convoluted. It is only possible to explore some of the continuous and intricate detail of their relationship.

Included in their comments about one another are many references to the semiotics of nonverbal expression: physical appearance, posture, proxemics, kinesics, and facial expression. Often it is not so much what they might say to one another, but how they look and act when they say it. It is not so much what each one does as how it is done. Voice inflection, voice volume, attitude during speaking and listening, rate of speech, and silences are all interpreted as meaningful and are fundamental to the composite "impression" teacher and children hold of one another.

It may appear that the semiotics of interpersonal relationships between these two key players is only superficially relevant to pedagogy. This is not so. The semiotics of pedagogy is predicated on more than the children's willingness to learn or on a teacher's compelling children to learn. The life of the classroom is more than the children listening to the teacher, copying notes, or answering questions. It is more than a flux of language, however well-intended. It is a living-together, a "becoming" together. This becoming occurs only when teacher and children know each other. To know, they must engage in and implicitly understand the semiotics of their relationship.

This brings them closer to understanding one another: to anticipate, to respond appropriately, to work together, to enjoy the experience of learning together, to circumvent difficulties, and to "become" in the fullest measure.

When the semiotics of interpersonal relationships are explored and explicitly described, some of the undercurrents of pedagogy become clearer: Why are some children "favorite" students and some teachers "favorite" teachers? How do children and teachers adjust their behavior and responses to changing circumstances? By what signs are they governed? What do the signs of compliance, non-conformity, behavioral disturbances or of exemplar behaviour, tell us about the child? Why do some children prefer to have "mean" teachers rather than "nice" ones? Answers to these questions are suggested in the semiotics of their behavior with one another and in the words they use to explain their own reasons for acting as they do or for interpreting life in the classroom in the way that they do. Transcripts and observations of teachers and children talking to and about one another provide us with new insights about what it means to be a semiotic being in the classroom.

Children's Semiotic Understanding Other Children

> I'm Nancy. I am nine years old. I have a sister and two parents. I don't have any pets. I don't like liver. I love cheeseburgers. My birthday is December 8th. My sister always picks on me. I have my own room. I live in a fairly big house. I have two best friends. Theirs names are Theresa and Nicole. And I have another just friend and her name is Ginny. I live on Crosscourt Avenue and my sister goes to Naswell Junior High School. I like swimming. I'm not very good at some sports, like football.

***

> Ny name is Nathan. I am nine years old now, but I'll be ten in May. I've been going to this school since kindergarten. I'm in grade four. I live in the townhouse just across the street. I've got a sister. Her name is Susan and I've got a big brother. Well, he's really my half-brother. He doesn't live with us any more. I like to go to the shopping center and play video games. I collect empty bottles around the block sometimes and sometimes I help my friend do his paper route.

Each child comes to school as an individual. Like Nancy and Nathan, each child has family constellation, a community context, and a social matrix in which he lives and grows. That individuality continues as part of the inherent being of the child. But at school his membership in the group of children defines him as a classmate, one among many. As children learn with their peers, they learn about themselves. In seeing other children act and respond in different ways, they gain some insight into their own behavior and responses. As children speak about other children, they are expressing by implication their own knowledge, interests, values, and expectations.

In describing the misbehavior of her classmates, Bonnie says, "I know I am not perfect. I like to talk to my friends too but some kids are always talking. That's not fair!" In this statement, Bonnie clearly indicates that she knows that children are different and that their transgressions are natural. But she also indicates that there are limits to the tolerance that can be accorded such actions. In her words, she has defined freedom and responsibility, and in doing so has given a cameo of democracy. It is doubtful whether Bonnie sees her own statements in the context of democratic behavior. This interpretation (articulated in formal terms) may not "come" to her until much later if ever. But there is no question that she believes in what she says about herself and others. In her statements, we are able to discern a child's point of view, and in understanding what it is she is really saying we can come closer to an understanding of what it is like to be a semiotic being in the classroom: responding to others and formulating one's own ideas and feelings from within that dialectical relationship.

There is an implicit challenge in interpreting what the children say. Too much philosophical weight may be given to their expressions or too little credence to their sincerity. Yet, to turn away from their insights, risks losing something valuable and rare. The following examples come from conversations with the children and from observations of their behavior with one another in the classroom. There is another world that they share in the playground but, except for several fortuitous references by the children, the focus remains in the classroom.

> Adele: I think Michelle and Stephen are the smartest in the class because they are both in white [the top level reading cards in the S.R.A. kit] and the best in swimming, and they almost always get their math right. They only get something wrong if it is on a real test.

[What does it mean to be smart?]

> Well, you can get good grades and stuff. When you go to university and get really, really good grades like A and A+, then you get to go to university for free. [because you may be awarded scholarships].

[Is it important to be smart?]

> Yeah!...Because like...say you're not dumb and you don't know your times tables...On the city-wide tests, you wouldn't know how to do them because you'd be using your fingers and stuff.

[This is a lesson {on the video monitor} about The Baker's Daughter and everyone, except Denise, is reading from the textbook. She's reading Freaky Friday. Why is that?]

> Because she's done her questions. She's fast! Very fast! She's usually the first one finished.

Adele has no doubts about why she considers some children "smart". Two semiotic characteristics form the basis of her interpretation: their accuracy and their speed. To know is to know something quickly, to be able to articulate it without hestitation or having to work through to the answer. To know is know now. To know is to be finished before others have really begun. As Brian exclaims when Danny adds a long column of figures, "He's finished adding it up?!" Brian is still looking for his pencil (on his way to the problem) while Danny has passed beyond it with a rapidity that astonishes Brian. To know is to take a direct and sure route to the answer, not to be detoured with calculations such as counting on your fingers (as video scenes confirm Adele does). "Smart" children's accuracy is often reflected in their neatness; the answer is simply placed upon the page. The one-who-does-not-know leaves erasures, smudges, roughed paper, clumsy lettering or numbers (all the traces of not-knowing), signs all too quickly read by others, especially the teacher.

> [{to a kindergarten girl} What does it mean to be smart?]
>
> > Melinda: Well...it means you get your work done. Really fast. And the teacher doesn't have to help you. And you don't bother anybody.
>
> [Does it matter if you're smart or not?]
>
> > {very casually} Well, if you don't want to, you don't have to. If you want, you want to.
>
> [Is it good to be smart?]
>
> > {tips her head to the side, purses her lips, nods and nods, and says softly} Yeah.
>
> [How do you know if the teacher thinks you are smart?]

> She puts check marks on your paper. And sometimes she prints "Very good" on it too. She did that to my work...once.

It is possible to hear a certain wistfulness in Melinda's comments. It is May, nearing the end of the school term. Melinda's work has been marked: "Very good". Once. Only some people are smart. Others are fated to work harder and for less rewards. Melinda has just started her formal education but she already knows (as most children do) that there _is_ a difference between those who are smart and those who are not. That difference has a profound semiotic component--the skill, accuracy, and speed with which children can use multiple sign systems.

In addition to having the semiotics of the capable child continually before them (perhaps as a reminder of their own pedagogical rank in the classroom), some children are sensitive to other kinds of relationships between the children.

> Bonnie: Brian, for instance! He bugs you! He teases people over any simple thing. (Like, _you_ don't know him!) You just feel like you want to go up and hit him or something. Or tell him to get lost or something. But you can't because that would be rude. Then you'll regret it later on because...you know...it's not something _really_ bad...It's really annoying though. You can't work.
>
> And Matthew, he just ignores whatever Mrs. Wayne says. He goes by someone and they'd say something to him and he'd start bugging them and say, "Where did you get that ugly face?",

> and he'd insult you. And you'd really feel that you want to do something to him to get back at him, but you always regret it later on.

The examples given illustrate the two dimensions within which children build their relationships with children in the classroom: their pedagogical, and their social interaction with others. It is important too to recognize that the relationships that sustain the children are not always bounded by the classroom walls or the school ground. Children do not necessarily compartmentalize their friendships and concerns as "in" or "out" of the classroom. These are an integral part of their lives and are affected wherever the children are. But as Bonnie implies, there are implicit values that govern children's relationships with one another, and these values determine for each child whether that relationship takes on the connotation of "friendship" or not. That relationship depends a great deal of the semiotics of each child and on the interpretation given to that semiotic behavior by others. How a child speaks, acts, and responds creates a "meaning" that attracts or inhibits a continuous interaction with others.

Children's Language as a Semiotic Relational Link to Others

In order to discuss children's semiotic understanding of each other, it is necessary to consider (at least briefly) ways in which their language is critical in the creation and continuance of these interpersonal relationships. Language is more than words and ideas exchanged between them. It is the means through which they create their becoming-and-being-together. There appear to be three primary roles that language plays in their lives. Language is simultaneously what they are learning (as "language", a way of personal expression), how they learn (as the means by which ideas and knowledge are nurtured in their minds), and how they use that language and that knowledge in relating to others. The magnitude of exploring these semiotic patterns is confirmed by the volumes of literature and research on the topic of children's language. The discussion here is limited to how children use language to describe their lives in the classroom, as the semiotics of interpersonal relationships.

One of the fascinating semiotics of children is the fluidity of their language in these relationships. Words come into their language then rapidly disappear. Tony tells of a word that surfaced quite spontaneously while the children were out on the playground. It was late fall and the ground was hard with frost.

Tony: Spaz!

[What does that mean?]

> I don't know! We just kept on going, "Spaz!" He was shouting around, and he called, "Spaz!" If the ball had hit them, and it was their fault, we would go "Spaz!" Like my friend in this other class, she kicked it too high, and she said, "Spaz!" She's calling to herself. She calls herself, "Spaz!"

[Did that word just start today?]

> Yeah! We were just having fun!...We had this ball and we had to kick it, and the guy who had it, had to run to the back. All the other people had to jump and let the ball go under their feet. When the end-person gets it, it goes to the front-person. The front-person runs to the end of the line. After a while, another person does it. It's real fun!

Children's language is experimental. It is not bounded by convention. It might be that the root of "Spatz!", used so freely by the children on the playground, can be traced to "spastic", a condition typical of cerebral palsy caused by brain lesions that affect the individual's ability to control movement. As far as Tony is concerned, the word is a spontaneous generation in the act of playing ball. However, it may have been "carried" onto the field by one of the children who had heard it used elsewhere. There is an ironical appropriateness in how it is used on the playground, e.g., describing inept control of the ball and its original meaning (if credited as I have suggested). But, for a brief time, "Spatz!" on the playground is a signal from one child to another, an expression of self-annoyance, of a score missed, or a sound that points to a completed play. It is an efficient semiotic in the rush of playing. It is a tribal call: together we are in this game. "Spatz!" As much as it includes children in play, it excludes others. It forms a boundary between those who know and those who only wonder and watch.

When children are in school, they trade their concepts, understandings, appreciations, and knowledge through sign systems much in the way that currency is exchanged for objects and services. Words and gestures have a denotative and connotative value. In the following example, Brian cannot make the right "change" for a certain word. He is reminded that the transaction in which he was to have learned that word's value has passed. Now he holds no "credit"; although Christopher does his best to help him out. But once again, language is seen not only as a link into meaning but also as a link into relationships with others. The example also illustrates how, as the lesson progresses, a perceptive teacher creates meaning by relating examples to the children's lives.

> Mrs. Wayne: Listen carefully to your instructions. {Reads} Write the list words that are the names of birds and mammals.
>
> Brian: What are mammals?
>
> Mrs. Wayne: We talked about what mammals were one other time when we had spelling.

8

> Christopher: I'm a mammal. You're a mammal.
>
> Mrs. Wayne: Yes. Listen carefully. We've done work where they have asked: Write two sentences showing two different meanings, two different definitions. That's what you have to do here.
>
> Cindy: We make up meanings?
>
> Well, it has to be a real meaning.
>
> Yeah!
>
> So you make up a sentence. Two sentences to show two different meanings. Like the "glasses" you wear on your nose are certainly not the "glasses" you fill up with orange juice.
>
> {Class chuckles}

The semiotics of pedagogy (of explication) contribute to more than the acquisition of knowledge. By her amusing example, Mrs. Wayne creates a rapport between herself and the children. As the children smile at one another because of this verbal twist, they become more amiable to the assignment. The ambience of the classroom changes and, in that change, is a more positive attitude toward learning. When contrasted with lessons where, out of necessity, a heavy disciplinary tone is taken by the teacher, the difference is obvious.

The children in Mrs. Wayne's classroom (and in virtually every other classroom, at any level) use language in its written and oral forms with varying skill and imagination. Although the following two stories come from different lessons, i.e., November and late-December, they effectively illustrate the differences in children's story-telling and writing ability. Implicit in this writing performance is the child's academic standing in the classroom. This in turn affects his relationships with some children by including or excluding him from any permanent relationship with them. Further, his semiotic competence affects his relationship with Mrs. Wayne because it determines, in part, her obligation to him and the degree of progress he is likely to make during the school term.

Paul volunteered to read his story into my taperecorder. While he did have some spelling errors in the original, I did not retain a copy. Less than half of the story is given here:

> Paul: This is: "Haunted Story by Paul"
>
> I was on my way home from school. I stopped at this old spooky house, opened the door and went in. All I could see was an old stairway in front of me. I looked around and saw that everything was covered with big white dust covers. There was no lights at all, so I..."OOh!"...
>
> All of a sudden, I heard something coming down the old rickety stairway. I looked around for a place to hide. I hid behind a thing where I came in. Then I noticed a little hole. I could see what it was on the stairs. I looked and saw it was a big, lazy cat. It went into the kitchen. It must have been hungry.
>
> I remembered I had to go straight home, so I started out the door. Then I saw a car. A man in a black cape walked out. I ran into the kitchen and looked around. I looked everywhere! Finally I found an empty

> cupboard. I went in the cupboard and I was very quiet. It seemed like a year. I was very cold, so I went out and found...I went to the front door. It was locked. So I looked for an opening lock but there wasn't one. I became very scared and frightened. I just took off my coat, laid down on the couch and very slowly fell asleep.
>
> When I woke up I found myself in a room with a princess beside me. First when I woke up, I was very frightened. But I had a feeling she was going to be very nice. In a matter of minutes, I was settled down. She said, "I probably saved your life." "From what?" I asked. "A ghost-man," said the lovely princess.
>
> "Maybe I should explore this house and find that ghostman. He should be ashamed of himself, frightening a mere boy. Do you have a mirror so I can exterminate him for life?...Oh, I forgot. Is there any lights in this house?"
> "Yes there is," said the princess.
> "Can you turn them on please?"
> "There is a switch on the wall."
> "One more favor. Do you have a knife?" I asked.
> "Yes. In my book."
>
> "Good!...Well, I'll be back in about an hour. If I am not back, phone the police, and get a search party looking for me. If you can't find me, then you phone my parents. Here is the phone number. 403-7897...See you in an hour!"

Mrs. Wayne believes that periodically sending each child's writing-folio home helps parents keep in touch with their children's work. She is particularly interested in showing the progress the children made during the year. In this way, the folios become a semiotic record of the child's achievement or lack of it. While I was looking through these folios one afternoon, I came across Brian's story. It appears here as he wrote it:

> This is Brian's story of Jeasas. We all sailebrate on Christmas becasue Jeasas was born on Christmas day. If it wasn't for Mary, Jeasas won't be alive. A lot of people know that Jeasas was born in a small barn.

The most informal analysis of Paul's and Brian's story reveals a startling difference in many critical features: the amount written, the mechanics of spelling and punctuation, the use of dialogue, the inclusion of personal feelings, opinions or reactions, the length and complexity of sentences, vocabulary range, originality, and style. Clearly, children use the semiotics of composition with varying skill and effect. Furthermore, in teaching the lesson and helping each child begin writing, in encouraging the children while they are writing, and in praising or correcting their work on its completion, Mrs. Wayne must accommodate to the broad spectrum of semiotic competency that the children represent. From the signs the children give in their writing and in their behavior, she must quickly and accurately assess just how she must relate to each child to encourage optimal achievement during that lesson and during the school year. This continual monitoring of the semiotic performance of each child is extremely important. It is just this obligation that makes teaching such a concentrated and demanding task.

In turn, the degree of difference between the children's performance and the teacher's gauge of grade performance affects the child's relationship with the teacher. While not definitive, it is part of the total semiotics of the child that the teacher (consciously or unconsciously) places in the context of her understanding of the "child".

Further, (and this brings the discussion into the context of children's semiotic understanding of other children) the semiotics that the teacher gives back in the classroom context about this child have a role to play in how the other children accept that child and in how they define their own relationships with him. From observing the children informally, it would appear that children of like academic abilities tend to form friendship groups. The semiotics of a child's school achievement appear to be an implicit criteria for creation of relationships with some children and for excluding entirely the possibility of relationships with others. The traditional spelling bee fell into disfavor on just this basis: that non-spellers were conspicuously the last and desperate choice of team captains who were themselves more likely to be "top spellers" than not.

This type of grouping of children of like-abilities by teacher or by children is less obvious now but can still be witnessed when children cluster to work on group projects such as social studies, science, or language arts. It would appear too that even in specialized ability areas such as music and physical education core-friendships are predominant in choosing with whom one sits or in choosing teams. These core-friendships seem to override any specialized talents or abilities in favor of the semiotics of similar academic performance. In Mrs. Wayne's classroom, Danny, Tony and Don; Nancy, Bonnie, Marnie and Denise; or Matthew, Jimmy and Brian; and Adele, Lisa and Cheryl frequently create their own groups whenever the opportunity is presented to them. At least part of their decision to work together is the level at which each one performs individually in key subject areas. This compatibility appears to be based on similiar semiotic performance levels.

From one point of view, there is an interesting variation to the relationships between academically-alike children. As a new student, Christopher did not take long in establishing a negative reputation for himself. Mrs. Wayne had been forewarned by the sheer weight of the cumulative file that had arrived shortly after he did. It was a semiotic red-flag hoisted by one teacher after another as Christopher moved from grade to grade and from school to school. Although Christopher had consistently scored very high on group and individual tests in formal testing situations, he did little in the classroom other than cause a great deal of interference. This was his designatum. Within a day or two, the children learned that their classroom life would never be quite the same. Christopher attracted the admiration of other misbehaving children and together they soon changed the ambience of the classroom. There were few options for Mrs. Wayne:

> Mrs. Wayne: Christopher was in the office the first day that he was here. The next day he earned a half-day suspension for fighting on the playground. He's been in the office more times in the last few months than I can count.
>
> Well, he's either there or out in the hall. I've moved him all around the room, trying to find the right place for him. Which really means a place where the rest of the kids will put up with him.
>
> Actually, he's not too bad where he is now. Marnie has just been so good with him! She's a dream! And I even wrote in her diary how glad I am about her. She just thinks Christopher is great! She likes him. Not the negative things he does. But she's seeing all the good things about him.
>
> She gets along really well with him. And she's the only one in this whole class that can tolerate, really tolerate him, and yet not ever complain about it at all. I don't think she even thinks about it that way.
>
> She would come and complain if she felt like it. She would say, "Christopher is bugging me." or whatever. Fine. So it's not like she's going to bottle it up. But it really doesn't bother her. She likes him.

What is particularly interesting is that, despite Christopher's persistent behavioural problems, he and Marnie are academically at approximately the same ability level. This may be a quality that Marnie implicitly recognizes in Christopher and it may account for their compatibility. It may be, of course, that Marnie who is very much a conformist admires his daring. Or it may be Christopher's "good looks" that form the semiotic link for Marnie. Whatever motivates their relationship, it gives Christopher a quiet, positive interaction that periodically distracts him from "performing" more disruptively in the classroom.

***

The Semiotics of Children's Relationship to Pedagogy

Just as the children create relationships with other children on the basis of their academic ability, they also create relationships with content areas. Because of the demands made upon them to think and work in a given subject field, children will "relate to" and enjoy a subject or "hate" it. During a comma lesson (infra:487), Cindy and Brian react to the semiotic requirements of the lesson with semiotics of their own.

> Mrs. Wayne: {continuing} All right. I would like all six of those sentences done in your neatest handwriting.
>
> Cindy: (protesting) Neatest!?
>
> ...with all the commas.
>
> Do we have to do it in writing?... Oh, my stomach hurts.
>
> [The children have worked on their assignment for some time]
>
> Mrs. Wayne: I would like someone to come up and put in all the commas? Danny. {Just then the noon bell rings}.
>
> Brian: Lunchtime, already?! It sure went fast!

Children not only use language for expressing their own needs and as a means of learning but they also see their language as bringing them into a relationship with the adult world. Over and over again in conversations with me, children from kindergarten to grade six, said that they come to school to learn to read and write. By far the majority added, "so I can get a job when I finish school". It is as if they see a power in literacy, a power that adults hold. But in giving a new status to their writing, Mrs. Wayne is helping them recognize the value of their work now.

> [I got some interesting feedback from Paul on your typing his stories. I teased him a bit. "Are those stories written by grown-ups?" I asked, (knowing full well he has written them). "Oh no! They're not! I wrote them!]
>
> > Mrs. Wayne: They love to see it typed. It is just fascinating. I double-space it so that they have written two pages. It is a little disheartening to write five pages and then it comes out as one! So that's why I do double spacing, and they are as pleased as punch!
>
> [Well, Peter is certainly all for it. I asked him if it could be a story if he just told it into the taperecorder. He really thought about that for a while, and then said, "No, it has to come out of your head. And somebody has to share.... No, you have to write it down.]
>
> > So other people can read it. Good.

The children's pleasure at having their stories in a typed format is matched by their pleasure in having these stories bound and placed on the library shelf for others to read. For them, the semiotic circle has been completed in this act. The sign (their story) is created, presented with style, and placed before others. It can now give what it signifies and its signification is two-fold: as meaning understood by others and as reward to its creator. In its tangible and distinctive format, the story creates a relationship between the child as writer and another child as reader. When they are both in the same classroom, that sharing can then be turned into an active relationship because of the text that joins them.

> Mrs. Wayne: They love reading their own stories. They devour those books.

While the discussion of the semiotics of children's language and the power of it to enhance or suppress relationships with other children can be extended considerably, the description of a portion of a lesson will suffice. Nancy's role is particularly significant in orchestrating her group's dynamics.

The children are writing free-association poems. They are gathered in small groups about the room.

> Nancy: {contributing the first lines of the poem} We're free and alive as can be. Up in the sky, free as can be, like a little lee.
>
> {Giggles from her group}

[Okay, what else goes with "up in the sky"?

> Denise: Float....
>
> Nancy: (inspired) Floating gracefully! {quoting} "Floating gracefully."
>
> Denise: {writing} ...the sky.

[Next idea?]

> Nancy: "Floating gracefully."
>
> Lindsey: Denise is going to write them down.

Nancy: [in a tone of false modesty] No!

[Go ahead, Denise.]
Nancy: {wondering} What else?

[If you are writing, they have to keep popping ideas.]

Pop!...Pop! Pop! {Giggles}

Denise: Don't be silly!

Lindsey: {continuing with the poem} Forming different shapes!

Nancy: They float so gracefully.

Denise: We've got that one!

Nancy: Oh.....forming in the sky.

Denise: We have that one already!

Nancy: Forming in the sky....?

Lindsey: So delicate and gentle.

Denise: White and fluffy, in the blue sky.

Nancy: Let me tell the next!...So...uh... like...like a soft kitten's fur. Like a soft kitten's fur. White against blue!

Denise: White against blue!

Nancy: {dictating} White against blue.

***

[Hi. This is Adele's group and company. How is it going?]

Good!

[Adele, will you read what you have?]

Adele: Rainbows, sunshine and birds.
Pretty pink flowers.
I can be a red rose.
Grass waves around me.
The sky glows pretty on me.

[Nice! What do you have, Sarah?]

Sarah: Flowers, snow, rainbow, cherry and little people.

[You are off to a great start!]

***

[Hi fellows! I'd like to hear about your monsters. How many ideas do you have down?]

Don: None.

Tony: We didn't get any down.

Andrew: We didn't get anything down.

Don: But we can tell you what we might think of.

[Good. Let's go around in the circle. Okay?]

Don: Well, I suggested back in the reading corner, a monster with eyes falling out all over.

Christopher: And blood and all that!

Andrew: I'm so strong I can squish your guts out!

Christopher: I don't have anything yet.

[Take a look around in your head and find an idea.]

Okay!...I can gnash somebody in the stomach and their guts come out! All you have to do is push their temples and their eyes pop out.

***

[Lisa is the scribe as others give her ideas.]

Lisa: (spelling) O-r-a-n-g-e, orange.

Chorus: fire...breathing...breath.

Carmen: breathing...{as Lisa
writes}...brea...

Lisa: b-r-e-a-t-h

Carmen: i-n-g ...breathing...and breath!

Lisa: {reads} Fire-breathing breath.

Carmen: Okay. Now about the tail.

Adele: Long and scaly.

Carmen: Waving.

Lisa: No, don't put his tail waving!

Carmen: You know how his tail goes "work,
work, work!"...We could put Compound W on it!
[TV reference?]

{Giggles: Compound W!!}

{overcome with giggles}

Carmen: Okay. Let's get back to the subject!
Purple ...polka dot...body!

Adele: His tail could be a different color!

Lisa: Grey!

Carmen: Green! I like green!

Lisa: Grey, black, and...brown.

Carmen: Brown?

Lisa: Slimy tail!

Adele: Put scales on it.

Lisa: {as scribe} So what do I put?

Kathy: Green. No, no...Grey.

Lisa: Okay, {writes} grey...

Kathy: Black...brown...

Lisa: {writes} brown...

Kathy: Ugly.

Lisa: {having trouble writing their ideas so quickly} Just wait!

This is an interesting example of children triggering their own ideas one from the other. It is a slow process. They tread carefully, looking for ideas that they can contribute and respecting ideas already offered by their groupmates. There are few rejections, only modification of sequence in the ideas presented.

Their team-work is very different from another boys' group. Lisa's group, with intentions clearly understood, focused their contributions on their theme. In the end, they were pleased with their poem and with themselves. Not surprisingly, the boys' group had conflicting interpretations of what they were "supposed to be doing", did not complete the assignment, protested at the "time's up" signal, and blamed each other for not finishing. Their difficulties arose as much from their unwillingness to work as a group as from their inability to consolidate their ideas. The lack of harmonious semiotics in their relationships interfered with their using language in the manner intended by Mrs. Wayne. Conversely, the lack of written results created static in their personal relationships.

The Semiotics of Children Talking Together

Not all classroom activities present opportunities for the children to talk with one another, although Mrs. Wayne does understand the children's need to talk during the day.

> Mrs. Wayne: If they are talking about what they are doing, and I am not teaching, and they are reasonably quiet, then it's acceptable. They are usually helping each other out. In a test situation, of course, they can't.
>
> But for the most part, if they are busy with their work, they don't want to talk. So if they are talking, it is because they don't understand something. I usually go over then and see if there is any problem.
>
> A lot of the time, they are just chatting, as well as working. I figure that's great: they're communicating. They're expressing themselves. They are using language and that's important. That's one of the important things too about recess. They are using language.
>
> In class, if all twenty-seven are talking, they are getting a lot more practice than if we are having a discussion and I have only one person talking. It depends on the kind of lesson we are having, but usually I don't bother about their mini-conversations in class.

Danny tells the story from the children's point of view. His first comments were given in late September; the second ones, in May.

[How much do kids talk to kids in school?]

> Danny: Lots! It is practically impossible not to talk to another person in school. Like if you need help, you talk to them. And at

recess, you talk to them. You talk to your friends. And if you sit by a friend of ours, you like to talk to him.

[Do I hear you say: It is practically impossible not to talk to your friends. Even when the teacher expects you not to?]

Yeah...It's kind of weird. Like...the teacher knows you can't sit there all day {demonstrates bolt-upright position, with lips tightly pressed}...saying nothing.

---

[The kids seemed to be pretty casual in the story-centre today. Do you think they were really listening?]

Lots of them do. And lots of them don't.

[How can you tell who is doing what?]

I can tell...Jimmy, Brian and Matthew are very talkish guys. They like to sit just like this: {demonstrates leaning into each other} and when they sit like this, they are not paying attention.

[How can you tell?]

Because those two when they are together, they are just a nuisance. {laughs} They like to fool around.

[How do you know that?]

Cause I see them fooling around a lot. It's not that hard. After all, when you re fooling around...throwing things...not really throwing things...making faces across the room! Well, everybody can tell!

[How do kids learn if they are always talking?

Danny: I mean...they shouldn't be able to talk all the time, but they should be able to talk. Like...if they are just sitting there...{demonstrates perplexity}..."Oh, I am really stuck!...and the teacher's busy with another child, and I don't want to waste time, so I better ask my neighbor." They usually can help.

[Sometimes I think the conversations don't stop there, right?]

No. They just keep on going! {smiles}

[Why does that happen? I mean, you start with good intentions, right?]

{laughs} Then we just don't finish!

[But you know you are going to get heck if you get caught, right?]

MM!

The inevitability of the children's desire to continue talking to one another is clear. Paradoxically, the rules of classroom behavior are understood but the satisfaction of talking, especially if the other person is amiable to continuing the exchange, takes precedence over the rules. Danny responds to this observation with a smile and a self-deprecating laugh. Of course this is what they do! How can anyone expect it to be otherwise? Especially a teacher who knows children?

However understanding teachers and children may be about the children's need to talk, to share semiotically those things that are important to them, there are limits. When these limits are crossed, another context is given to the act. Danny describes his feelings when someone is reprimanded by Mrs. Wayne for talking in class.

[When Mrs. Wayne is teaching a lesson and one or two kids start being a nuisance. How do you, as a part of that class, feel?]

> Danny: Mad! Because if Mrs. Wayne stops the lesson, right in the middle there, they are making _us_ lose...whatever it is... say, our gym! I don't want to miss that! Because gym is athletic and you have to have a few athletic abilities.
>
> It just isn't fair because _we_ are being good, and everybody else is making us miss our period! I think Mrs. Wayne should send those two out and make them miss, instead of the people that are being good miss it.

[How _serious_ does this have to be before she sends them out?]

> Mmm...It's sort of like...{pauses} I don't know. That's sort of tough. I don't know how she decides. Like...probably after she warned them once, and they keep on doing it, probably send them out in the hall. That's what I would do, if they are fooling around too much.

[So, are you saying that children should not talk when a teacher is giving instructions?]

> Ugh. Ughh. One of our team members on our soccer team did that...talking to another soccer player and _both_ of them missed the game because they had to stay in. That wasn't fair. Our team lost.

[Do you think it was the teacher's fault?]

> No! _Their_ fault!

Sarah adds another dimension to our understanding of how children's behavior affects others in the class. She suggests there are degrees of acceptance and degrees of annoyance, depending on one's relationship to the person at fault.

[How do you feel if Mrs. Wayne is scolding one of your real close friends?]

> Sarah: I kind of feel real sorry for that person because sometimes it's my fault, because I like talking to them. Sometimes I started the talking. But they are getting heck.

[How do you feel when it's somebody you don't know very well?]

> Well, I kind of feel sorry too because I don't know what they are like. I don't know if they care or not. I just feel embarrassed.

[When somebody is being a real nuisance in class, and Mrs.Wayne has said, "Stop talking, please." or "Be quiet." or "Pay attention."... how do you feel?]

> I feel that she's talking to me. And when she points to them...(She knows it's rude, but she tells them)...and she says....like when she went to Shawn, she went like that: {points sharply and repeatedly on the desk and speaks in rhythm with the pointing} "You get to work, right now!". And I felt mad at Shawn because he wasn't doing his work, and giving Mrs. Wayne a hard time.

[Ah. So you care about how things are going for her?]

> Yeah. And I want her to have a nice day.

The Semiotic Undercurrent of Children's Relationships

In the examples presented, it is patently evident that it is not possible to separate the semiotics of children from an interaction with their teacher. While there are discrete relationships exclusively between children, the classroom invariably places the teacher in the context of those relationships. The following example demonstrates that while Mrs. Wayne commands the children's attention by virtue of instructing them, there is simultaneously an undercurrent to the children's semiotic life. Mrs. Wayne is conducting a visualization exercise prior to the children's writing group poem, a situation described earlier.

> Mrs. Wayne: Imagine you are a snowflake... Where are you coming from?....The sky?...What do you look like?....[Children begin movements of a snowflake drifting down. Several exaggerate and are "silly" about it]...Are you feeling fluffy or heavy?... {stops abruptly} Excuse me!
>
> Chorus: Sh-h-h!
>
> Remember what happened before when you got silly?...
>
> Shawn: We had to stop.
>
> {continuing} You are now on the ground and there are piles of you. What happens when somebody decides to walk through you?
>
> Cheryl: Oh no!
>
> [In response to Mrs. Wayne's cueing, others make a variety of sounds and exchange brief comments as they enact the fate of a snowflake)
>
> What happens when the sun comes out?
>
> {General consternation}
>
> What do you look like when the moon shines on you?
>
> Andrew: Scarey!
>
> Yes, Don?
>
> Don: Oh...Forget it.

> Mrs. Wayne: What I want you to do now is to get into groups. You will have until...let's say two-thirty...By the time I get you all organized....Now listen carefully.
>
> {Quick comments, generally favorable}
>
> Nobody is going to be getting into group unless you are listening to all the instructions, right?...I will give you a choice in the number of persons in your group: three...four...or five persons working together. Nothing less and nothing more.
>
> Stop. Some of you are still talking... {louder} In your groups, decide what you are going to describe. We have just practised on two very different topics: monsters and snowflakes. Now, maybe you are going to be a blade of grass, or maybe you are going to be the sunshine. Maybe you are going to be a white fluffy cloud floating across the sky... or maybe you will be a city with all the smog, the soot....or maybe you are somebody's home.
>
> What I want you to do...Freeze!...I am giving you the instruction now. You are supposed to be listening. {long pause}
>
> You are going to brainstorm. That means you write down phrases...as many as you can. You can either all write them down...or you can take turns...or you can choose one person who is going to write them down...or who will volunteer to write them down or who is a good writer. Then after that...and right after recess, we are going to get together in groups, and you are going to choose your favorite twelve descriptions and make a list poem.

While it is possible to infer from the transcript that there was considerable interaction between the children as Mrs. Wayne gave these instructions, observation notes of this lesson present an even fuller context. For example, during this time, the children were sitting in a circle on the library carpet area. At the moment they were told that they would be working in groups, they began whispering and signalling (sometimes across the circle) to the ones they wanted to be with. Similarly, they whispered likely topics to members of these subversively-formed groups. As Mrs. Wayne spoke, they decided who would be the recorder. These decisions were made to Mrs. Wayne's "voice-over" and provoked her into stopping periodically to ask them to be quiet. However, the children obviously did not delay their interaction to sit quietly and passively during her instructions. In effect, they were one move ahead of her.

It did not appear that Mrs. Wayne was aware of the specific purposefulness of their chatter. She spoke of activities and decisions that they would have to face. However, they made these decisions as she articulated them. For example, during the interlude when she was scolding them for not listening, they were involved in a very efficient and effective verbal and nonverbal exchange. The urgency of finding partners took precedence over overt listening to her. The first words Mrs. Wayne spoke set the children in motion. If she had but realized this, she would be flattered by their eagerness. In analogy, it was as if they were already racers running down the track as she set barriers in front of them.

In those few moments, an intricate dialectic evolved. The children could not proceed beyond Mrs. Wayne's explicit instructions but the rapidity with which they acted and interacted suggests that they responded instantaneously to key-words such as "group", "topic", "list". Watching them, it was obvious that they blocked out their decisions well ahead of the cumbersome and time-consuming language Mrs. Wayne had to use.

There was yet another undercurrent related to this situation. Not all children were selected during the children's pantomime to invite one another into a group. These children's attention was divided between the possibilities of being chosen by the leaders, being outlooked or ignored, or listening to the teacher so they would not add further to their dilemma.

I watched as Brian half-crawled across the diameter of the circle, tapped Rob on his knee, gestured to his own chest, and waved his index finger back and forth between Rob and himself. Rob shook his head and pointed his finger decisively to himself and two other boys: Don beside him and Danny along the circle. Brian sat back on his heels, his lips tight and drawn in disappointment. He lowered his head, then slowly slid back to his place in the circle. He sat dejected and withdrawn. It is doubtful whether, after this, Brian even heard what Mrs. Wayne was saying. Why should he care what was happening then? He had not been chosen to be part of any group. Rob had rejected his bid to join one. There was nothing else Brian could do. He had not been chosen. He was a sign no one wanted.

It is difficult for teachers to see these nuances. A hundred times a day, every day of a teacher's career, these incidents occur. But they are more than mere "incidents" to the children. During the explanations given by the teacher, some are caught up in the excitement of the projected activities. Others are distracted at some point because in one way or another they are not included.

One way to terminate the children's spontaneous interaction is to insist on total, obedient silence; but this risks stifling the children's willingness to learn. Another way is to segment the instructions with opportunities for the children to accomplish one phase or task before another step is taken. However, this adds a complication at each step of the way. There is no best way. But what the children's actions tell us in this episode is that they have an abundance of momentum for learning that can easily be misinterpreted or misused. What may be seen as resistance and interference may be a joyously spontaneous involvement in fulfilling just what it is the teacher hopes to orchestrate.

The Semiotics of Children's Private Lives

Not all of the children's semiotically-based exchanges are concerned with school work. The following examples occurred as a result of the children keeping diaries in which they shared their thoughts with Mrs. Wayne. These were personal journals and their confidentiality was usually respected with the children deciding if and when Mrs. Wayne could read their entries. However in May, the nature of two different entries (which reflected children's relationships with one another) caused Mrs. Wayne some concern.

> Mrs. Wayne: One day Brian and Matthew were in the class alone. They had been banned from choir because they misbehaved too much. They were so quiet and so secretive over something that after school I peeked in their diaries. And there were a couple of private notes. Matthew's said, "Oh, Valerie is really cute. I want to...her." And Brian's was the same thing "I would really like to...her." And it went on and on.
>
> I couldn't very well say I had read their diaries but the next day I did say, "You know, I have been thinking about it. Your diaries can be private but they can't be of such a nature that I wouldn't be able to see them." I said, "You can say almost _anything_. You can even say, "Mrs. Wayne is in a crabby mood today and, boy, is she ever miserable!" I said, "I can handle that. That isn't going to bother me or anything. But you better make sure that whatever you write in there, you wouldn't mind me seeing or your mother seeing." {laughs}
>
> I could just imagine pages being ripped out! I didn't say, "I _read_ your diaries and...." but I thought all night about that one before I mentioned it to them.

[Did you write a response to them?]

> No. Because they hadn't handed them in, I wasn't supposed to be reading them. That's how private it is. I went into their desks because I had a feeling something was going on because they were chuckling together. And they were very protective about it. Whenever I walked by, they covered it!
>
> I couldn't say, "I read a couple of diaries yesterday that were..." That would break the trust. Yet at the same time, I have a responsibility that I don't allow that kind of thing to go on in the classroom.
>
> ***
>
> Just let me get Bonnie's diary. The other day, she and Nancy were at it. But it was just so powerful...it is so full of hatred!

[Is that frightening for you as a teacher?]

> Yes, it is. {scanning pages to find the right page in Bonnie's diary}...She is really into girlfriend-boyfriend things, and into heavy rock too. Which doesn't help much. Let's see:
>
> {reads} Me and Nancy got into a big fight. And now she says she is going to beat me up. Ha! Ha! Ha! That will be the day when I die.
>
> That was her first entry. The next day, she wrote:
>
> > I just hate her! Of course, she is getting her way. I might be getting moved because of her. She started it. I HATE HER SO MUCH.
>
> Nancy's was similar, but not the same amount of hate. Similar things though. The next thing I knew...because they are intelligent girls, both very smart...they were the best of friends!
>
> But still, for this to come out? It's something you must be very careful with. Because it has to be stemmed, if those feelings are there.

[So, a technique as simple as a diary--writing to your teacher--can reveal such powerful emotions. This implies an incredible trust in you. It also tells me that the kids have an incredible need to say these things to somebody.]

> Oh, yes! For many of them, it is just bottled up. But it seems pretty major...especially when you get the drawings and the words.

[If we look at that drawing symbolically, what does it say?]

> Well, {pointing to the drawing}, here is Bonnie. And here is Nancy, down below. With blood all over her. Mean!

[The figures are in yellow. The grass line obviously dips where Nancy is drawn.]

> It looks like she's been stabbed.

{There is a long pause as we look at the drawing, each thinking our own thoughts.}

> But it is important that something as simple as writing back a couple of words--I had written: "You must feel awfully sad with these feelings inside you." And for the second entry, I had written: "I hope you two intelligent girls will find a way to be friends again." I am sure it meant a lot more for Bonnie to read it, just quietly to herself. Often when people say things, you are only half-listening. But she was really thinking when she read it.
>
> I could have taken them out and said, "You two! Get along! Shake hands!" But when they hate each other, they can shake hands but that's not going to make any difference. It can even make it worse.

The power of semiotics is obvious in the creation of antagonism between Bonnie and Nancy, in their writing, in Mrs. Wayne's interpretation of the diary entries, and in the resolution of their conflict, at least in part as a result of Mrs. Wayne's intercession. It presents a dramatic example of the pain and difficulty that children face in relating to one another. Whether or not the difficulties between these two girls stems from a personality-clash, from their academic competitiveness or from other reasons cannot be determined. But it is apparent that the presence, words, and actions of one provokes the other.

They stand as a sign to one another that has a high frequency of variation, ranging from: "They're the best of friends." to "They've been on-and-off all year." They stand too as a sign to teachers that the ways in which human beings relate to each other are extremely complex, delicate, and unpredictable. The very neutrality that is required for a classroom to function effectively may place a considerable strain on children who, in order to preserve their own semiotic image for their teacher, for others, and indeed for themselves, are required to suppress more deeply-rooted feelings. Yet these very feelings must be kept as an undercurrent if the classroom, school, and society are to be viable modes of living together.

Referring to the diary entries and private notes of children may be considered a break of trust, an ethical transgression, and an invasion of privacy. It was not a decision easily taken either by Mrs. Wayne in the classroom or by myself a researcher. It is possible to "excuse" the gesture by saying the children did not know that we explored the meaning of their private thoughts or that, by writing those thoughts in a diary, they knew they would be read by the teacher and that should have been caution enough for them.

It is possible, too, to justify our action by saying that one professional judged the sharing of these entries to be professionally important for another. It is on this basis that the decision was made to include the examples here. For, by understanding better the potency of the semiotic of interpersonal relationships as experienced and perceived by the children, we understand better the complexity of their lives as it affects their receptiveness to pedagogical experiences, and as it affects our own responsibilities in creating the most supportive and nurturing environment possible for them.

The diaries have brought us full circle to where we began: the children are individuals with their own designatum, their own signs, and their own connotative interpretant. The school reminds us that it is inevitable that some compromise must be struck when all these individuals come together as a class. Mrs. Wayne shows us that helping the children create that compromise requires patience, sensitivity, wisdom, and tolerance. The semiotic mazeways of the classroom are labyrinthine, a confusing and perplexing set of difficulties to be overcome precisely because they emerge from and are enmeshed in the dialogical thrust of living.

The Semiotic Power of Children's Groups

At a group level (although with no less personal implications) is the inevitable creation of cliques or "clubs" within the classroom. The story comes from Mrs. Wayne but provides a valuable illustration of another dimension of the children's relationships with one another.

> Mrs. Wayne: It's hard for the children to keep friends. The "clubs" are really powerful. They can be very cruel for the kids that are excluded.
>
> It's so nice when you are included, but the next day, you might be out! There are a couple who are always in. They are the _in-group_ and they are secure. And everybody on the outside wants to get into that in-group. I remember trying to do anything to get into an in-group. You'd get into the group and then you would be out! And so _hurt_! But you'd want _in_ again. It was just a vicious circle!

[But there are kids who never get in. They are a permanent out-group who aren't even considered.]

> That's for sure. Some of them don't _want_ to get in either. I really don't think that Cindy would care if she was in there. She is sort-of-out. She gets along with everybody. But she isn't excluded in the same way that...sometimes...There again, if somebody wants in, the in-group will say, "Absolutely, no! No way!" Those are the ones that get hurt. But there are a few who just really don't care. They would never attempt to get into those groups.

[Is it because they know that they don't "qualify"?]

> Not necessarily. They have their own little group. If you think you don't qualify, I think you are going to try to get in. You have to _want_ to, or be a bit envious, in order to feel _out_.

[How much shifting of that kind of relationship occurs?]

> It can shift every day: from morning to the afternoon. I hear it all the time. You are "in" in the morning and "out" in the afternoon. You can be "in" at the beginning of recess and "out" by the end of recess. And "in" again after recess. It does shift a lot. It's hard on the kids too. But there is _always_ the core that seemed to remain regardless.
>
> Someone says one thing wrong and then they're in tears. It often depends on the mood of the core people. They can just decide that they don't like you today. There's a lot of counterplay too. One of the biggest things they can say is something like, "Cheryl says she doesn't like you!" or "We don't want to play with you today." _We_. We are "in". You are "out". It _is_ hard.

For children on the teeter-totter of such semiotic relationships, life can be very difficult. One's own self-equilibrium is continually disrupted, put into question, and subjected to external manipulations. One's own self-image --the semiotic cloak that one wears--is continually pulled aschew. One is continually thrown off-balance by others' erratic "reading" of you. The teacher has little or no power to interfere in the subtle dynamics of children's affinity to or rejection of one another. Adults may give too melodramatic a reading of this seeming turmoil or not give it enough significance as an influence on a child's behavior and his receptiveness to learning at any given time. We must begin by recognizing that these difficulties in interpersonal relationships do exist. Then, with tact and diplomacy, we can begin exploring the issues with the children themselves. For now, it is enough that we know that the semiotics of children's relationships with one another sweep through the entire spectrum of emotions and that they are vitally important in determining their pedagogical life.

The Semiotics of Children's Caring

It is important to conclude this discussion of the semiotics of children by restoring the positive aspects of children's lives through examples of their caring for one another. The signs they give in their actions, words, and attitudes do a great deal to cement relationships or destroy them. As Nancy's and Bonnie's "diary episode" illustrates, these relationships can be painful as well as rewarding.

> [I was impressed with how "dressed up" the children were today. New outfits and all the careful grooming! Is this typical of preparing for the Remembrance Day service in the auditorium?
>
> > Mrs. Wayne: Oh yes! I think they love to dress up and, especially, since so many of them are in the choir.
>
> [Marie told me that somebody (not her family) bought her a whole new outfit.]

> They are on welfare and there is just the mom and the kids. There is no dad.

> [One of the girls said, "Your stockings are too big." And Marie said, "They didn't have my size exactly." Roxanne whispered to her, "Why don't you just pull them up?" They all sort of put-her-together and I thought, "Oh, isn't that nice!" Because she does look so attractive!]

> Oh yes. But they all had this sense of being special today.

To this point, the discussion has centred primarily on relationships between boy-boy and girl-girl or in the context of "our class". However, Mrs. Wayne is not unaware of emerging boy-girl interests of this age group (infra.:314). In February, she had made the following comments which illustrate the beginning of another kind of caring.

> Mrs. Wayne: There is an interesting combination developing with Lindsey and Danny. They have been critiquing their creative writing together a couple of times now.
>
> Another boy-girl combination that is really cute is Kathy and Tony. They are getting along really well. Kathy's Mom was in the other day and said Kathy is very excited about this new friendship. Tony reminds her of a friend she had back in Vancouver. He's so nice and he's smart. That pair clicked, right from the first day of school. But it's just on a friend-level.
>
> They do "go around" with boys, even at this age. They are mostly from other classes, for some reason. There are grade four girls going out with grade six boys. There aren't too many in this classroom. Even if they are going around together, they are able to do something like sharing their writing without being silly about it.

There is also an implicit caring in the relationship between individual children and their teacher. This may only become obvious when that relationship must come to an end. For example, Lindsey had told her friends and Mrs. Wayne that she would be moving at the end of the month. On her last afternoon, she walked in very slowly with Nancy and Denise at her side. They took their places in their desks. Lindsey folded her hands and looked straight ahead. Nancy put her head down on her desk and seemed to be crying. Denise bit her bottom lip for a time. Mrs. Wayne began the social studies lesson and the afternoon took its usual course. Shortly before the dismissal bell rang, Mrs. Wayne spoke to the class:

> You all know Lindsey is moving to another part of the city and will be going to another school. Lindsey, you know we will miss you. But I hope you will write to us and tell us how everything is going. You could take your letter to the school secretary in your new school, and she can put it on the school truck. {smiles at Lindsey} You won't even have to put a stamp on it!

Then the bell rings. Some children call "Good-bye" to Lindsey or come over to talk to her. Gradually, most of the children leave. Another teacher comes in to talk to Mrs. Wayne about arranging for ski-boot fitting sessions prior to the children's ski-trip. Lindsey begins to clean out her desk. She occasionally wipes a tear from her eye. Nancy and Denise are busy at the front blackboard, drawing a huge teardrop and coloring it in with pale blue chalk. Then, across the entire blackboard, in enormous letters, they print: "Good-bye Lindsey! We will MISS you!"

Lindsey, who has been inconspicously watching all this, gets up off her knees and rushes over to Nancy. They hug. Then Lindsey goes to Denise and hugs her. Denise moves away and goes to the coat-area at the back of the classroom. She collects Lindsey's jacket, tote bag and runners, and stands waiting at the door. Nancy helps Lindsey gather her books and scribblers. Lindsey looks anxiously for Mrs. Wayne who is still busy with the other teacher. Lindsey looks at me, hesitates a moment, and then comes over for a hug. When Mrs. Wayne is free, they hug for a long moment. In an overly cheerful voice, Mrs. Wayne says, "Have a good year at your new school, Lindsey. And don't forget to write!" They walk to the door together and the girls leave.

The semiotics of this leave-taking are particularly poignant. In their actions, gestures, and graphic "good-bye", Nancy and Denise give Lindsey something very meaningful to take with her--symbols and symbolic actions of their caring. It is intriguing that so little of this parting had been expressed verbally. But it did not need to be. Indeed, Mrs. Wayne's words of farewell did not speak of her feelings but were, rather, a "holding" to keep tears from breaking through. One semiotic was used to prevent another from coming forward.

> Mrs. Wayne: You have to be very careful that you don't encourage too much emotion or dwell on it too much, or say too much. You have to be sensitive to it, but accept the fact that it _is_ happening. Accept the fact that it's being _human_ to feel that way, and that it's _good_ to feel that way...without getting everybody awash in it. The whole class could have been crying, but that would have been an artificial thing. They wouldn't have been necessarily faking it, but we could have got caught up it in.
>
> {Laughs at herself now} I do feel teary! You know, I first met Lindsey when she was on the grade two track-team. I always thought she was such a pretty girl, beautiful blonde hair. She was always smiling, always so happy. You'd think she'd known me for years, the way she would come up and run beside me and chatter away. And she's just so nice and so thoughtful! She's had a few problems academically, but she's so well-behaved, disciplined, and dedicated.
>
> You know, she's been here four years. That makes it harder because she really belongs. She's been involved with community things, guides, track clubs, and choir.

Just as Nancy and Denise showed their caring, Mrs. Wayne shows hers. But she does it in _her_ semiotics: describing Lindsey's physical appearance, her personality, her academic ability, and her involvement. The girls have lost a friend; Mrs. Wayne, a well-like student. It is only appropriate that they will remember Lindsey in their own way.

Accepting the importance of the children's relationships with one another as a critical foil against which they create their perceptions of their classroom life, it is appropriate now to look at how, from a semiotic point of view, children create and interpret their interpersonal relationship with their teacher.

Children's Semiotic Understanding Of Their Teacher

At least in the pedagogical sense, the most important person in the child's school year is the teacher. In large measure, the relationship between individual children and the teacher determines the child's happiness and his academic accomplishment during that year. What is so clearly expressed in the children's comments that follow is their profound sensitivity to the teacher as a person and as a teacher. They are as astute scholars of her moods, feelings, expectations, frustrations, and successes as they are of any subject matter in the curriculum. How she feels and reacts to them and their behavior appears to be critically important. In an academic sense, this child(ren) and teacher relationship is important for it affects the amount and quality of pedogogy that occurs. But it is also important, and perhaps more so, in the interpersonal sense of people being together for considerable period of time each day for many months of the year.

The Semiotic "Reading" Children Give Their Teacher

Often the relationship between a child and his teacher germinates in his mind even before the term begins. If the school is a small one, then there may be only one teacher for each grade and, from one year to the next, children know just who they "will have" in September. The semiotics of any given teacher is frequently part of the children's lore about the school. For the children, there will then only be the surprises that come of living together with the teacher in a pedagogical relationship. In larger schools, there is a certain ambiguity about teacher assignment. Sarah and Carmen voice this difference.

> [When you were having your summer holidays, did you think about school starting again?]
>
> Sarah: I'm just interested in seeing who's going to be my teacher.
>
> [When you did find out and how did you feel about it?]
>
> Happy! Because I like Mrs. Wayne. I know her.

***

> [Can you remember back to the first day, when you were all in the auditorium and the principal was calling out the names of children for each teacher's class? How did you feel while you were waiting and those names were being read?]
>
> Carmen: {Very quietly} Nervous...
>
> [Why?]
>
> I thought I would be in the other teacher's room. I thought because I was the second last

person to be called. And when she called my name, I went, "Me?! Me?!" {Gives a huge smile.} I was so happy! I really wanted to be in Mrs. Wayne's room!

***

[How did you feel when you were waiting outside for the bell to ring on the first day of school?

Nancy: I felt nervous that I was going to be in a class with some mean people, or the teacher was going to be strict. And well, some people are going to pick on you, or pick a fight after school. Or whose class I was going to be in. And if the music teacher was going to be nice. If there would be any new teachers, and if I would get them. Who I would get for gym, and who I would get for everything?

[Did you talk about this with your friends?]

Like I said, "How do you feel?" and they said, "Scared!" and we were all sitting there, just...{huddles into own shoulders, looking ahead}

[Then you came into the auditorium. I understand there were teachers reading names to tell the children which classroom they were to go to. How did you feel before your name was called?]

I kept saying, "My name next?...My name next?!" or "Please be next!" or "Is it next?" or "Maybe my name isn't there at all!"

And I was trying to see through the teacher's paper to see if I could see my name. She was standing right there, but she kept moving the paper, and I couldn't see. Then when they called my name, I sighed {gives a deep sign} and "Oh, good!" Because I wanted to be in Mrs. Wayne's class. Because my sister had her before and she said she was a real nice teacher, so I wanted to have her.

[Now, if you had been assigned to another teacher, would that have mattered so much?]

No. Because everybody says he's a very nice teacher too. At the beginning of the year,

> there were rumours that he was really mean. But everybody thinks he's nice. He's a really nice person.

Nancy has described the tension, the anxiety, and the relief of finally being assigned to a specific teacher. The teacher's name becomes an anchor. "This is where I belong. Upon this sign, I can build all other signs that tell me who I am, where I will live this year, and what will be expected of me." Because that name carries a connotation (as fact or rumour) about the teacher, the children create in their minds an expectation that, as Nancy described it, may or may not prove to be accurate. That relationship can only begin with a naming, the pairing of the teacher's name with a child's name. Nothing can be signified--can become meaningful between them--until the two signs are brought together. It is the interaction of these signs (persons) that brings significance to their pedagogical existence.

The terminology that the children use is revealing: teachers can be "nice" or they can be "mean". Bonnie gives us a unique interpretation of these semiotic designations.

[Why do you remember teachers?]

> Bonnie: Because they are so nice. When you get them for gym or something, you think they are mean. When you actually get them for a class, they are nice.

[Why do you think they are going to be mean?]

> I don't know. Like in gym, the teacher doesn't know what you are like in your physical shape. So we think it is mean.

[Do they have to be mean because it is a gym class?]

> No. Not really.

[I thought: maybe, so you would be safe.]

> [Not really agreeing]...Yeah...

[Are you thinking of "mean" as "nasty" or as "strict"?]

> Teachers that don't care are really nice.

[What do you mean "they don't care."?]

> If they are really nice, they don't really care how you learn.

[Can you explain that a little more?]

> When teachers are nice, they don't really...I mean, you'd rather have a mean teacher than a nice teacher. Because a mean teacher, if he's really strict...you get everything in your head and you know not to do it. And when she's nice, she just goes "Oh, don't do that"...or something. "You're not supposed to do that." But when she yells at you, you get it into your head and you really find out...then you really know it and you never forget!

Here, we have the fascinating perception that a teacher who is "nice" doesn't really care, that the disguise of politeness really masks a kind of indifference to the child and his efforts. On the other hand, the "mean" teacher by the very intensity of reprimand or instruction seems genuinely concerned and attentive to the child's situation. In this case, the volume and emphaticness of the voice, the abruptness of the reprimand or lesson transitions, the close and continual monitoring of the child's performance is a far stronger indicator--an implicit signal to the child--that the teacher is vitally involved with the child's learning. It is as if the social etiquette of polite inquiry, similar to the ubiquitous "How are you?", does not imply any depth of commitment to the child. It is merely a procedural statement, part of the teacher's image of attending to the children. It is not accepted as anything more than that by the child. One must wonder whether "nice teachers" are aware that this might be one interpretation of their manner. It is evident from Bonnie's statement that superficiality does not escape a child's notice.

It is, however, a sad commentary that a "mean" teacher, with all the negative connotations of that term, is seen to be more educationally constructive to a child than one perceived to be more communicatively neutral. Is this a reflection of the anger and frustration that people in the broader society must bring to creating meaningful and needed reform in our communities? Does the "mean" teacher parallel the advocates for society who must turn to protest and rebellion to make themselves heard? Or is the society merely mimicing what occurs in our schools? Where does this cycle begin and, more importantly, where will it end? Can not caring and concern be expressed in supportive and positive terms? Can not a polite inquiry be seen as well-intended and genuine? And where is the enthusiasm and personal warmth that a teacher should bring to the classroom, to each individual child? What is it that interferes with "being nice" as a workable approach between teacher and children? Where have we come and where are we going when "being nice" is perceived, at least by some, as suspect and a gesture to be disregarded, merely an automatic response, a tarnished mirror of insincerity and indifference?

Having made that case, it is necessary to show the other interpretation that some children place upon the sign of a "mean" teacher.

> Shawn: We had Miss Talbot, she was...Oh! She was strict! Like if you even whispered in class, you would be sent right down to the office!

[How do kids act when they have that kind of a teacher?]

> Wuoo! They just sit back...{demonstrates}...

[{describing Shawn} All stiff. Hands folded. Shoulders straight. Mouth tight. Eyes straight ahead. Right?]

> Yeah! Like them act like they are in front of the firing squad. They act like they are in front of a guy with a machine gun and, if they just said a thing, he would blow their head off!

[Are you saying they are scared?]

> Yeah! Like a couple of years ago, this girl...she was talking with her friend...like she was having trouble with a word...and Mrs. Talbot said, "Go down to the office to get the strap!"

[Do kids learn more in that kind of strict environment?]

> (emphatic shake of head) Ngh! ngh!

[Why not?]

> I don't think they learn more because when you are strict, lots...lots of people who are strict...like when they leave, the child goes, "Hoo! My mom and dad are gone!" They think they can't really do anything when they are around.

[Does it seem to the kids that they are freer then?]

> Right.

[You said kids can't learn when teachers are too strict?]

> Yeah, 'cause they're worried all the time.

When the "mean" teacher becomes the unpredictable teacher, the children are "scared" and "worried all the time". Their attention is continually diverted from pedagogy to self-preservation: from concentrating on their work to governing all the signs they might emanate so that these will not signal to the teacher that, according to her implicit rules, some transgression has occurred. The teacher's "strictness" can mean that precipitous judgment, invariably negative, will descend on them.

In his spontaneous analogy to repressive parents, Shawn indicates that these children feel a yoke of censure on everything that they say and do. Only in the parents' or the strict teacher's absence can they truly be themselves. While it is accepted that total individual freedom can be possible (only and temporarily) through a total withdrawal from others, the children appear to sense that they are cut off from all social interaction. But it is just this semiotic relationship with others, with their classmates, and with the teacher that identifies them as a class, as students, and as individuals. This might be part of the explanation why children, glimpsing freedom when the teacher leaves the classroom, literally erupt with all the energy and self-expression that has been previously suppressed.

It is tempting to describe the atmosphere created by the signs of a strict teacher as a "regimental" or "dictatorial". There is only one control--the teacher's--and the weight of that control deprives the children from maturing in their own self-control. When a teacher determines group and individual movement, the use of space, resources, and time, and even the mind-set of the children in the classroom, exclusively on the bases of her own perceptions and without any consideration of the children's needs, semiosis is one-sided. It gives, as a radio does, with no opportunity for response or interaction. Except in a most narrowly-defined sense, such pedagogy is neither communicative or relational. If such a teacher is totally unable to tolerate receiving the semiotics of the children, they become an impersonal mass rather than individuals in their own right.

When the children "worry" about what might "happen" to them in the classroom, educators need to worry about the kind of education that is even remotely possible under such circumstances. Where content, ideology, or teacher-ego take precedence of children's joy of learning and accomplishment, serious questions must be asked. In semiotic terms, if interactive dialogue and relationships are not part of pedagogy, the interpretant can only be extremely limited and limiting. If the teacher thwarts semiotic free-play and continually commands the children to follow only a one-way one-sign path, she robs them of the fullest sense of learning. When the control of behaviour is the primary objective, control of the mind is inevitable. When children learn only to avoid punishment, their learning is a travesty.

The Semiotics of Teacher's Face and Action

How children interpret their teacher's appearance, expression, language, and action highlights how they build their semiotic relationships with her. What do children "see" when they look at their teacher and what does this mean to them? From what teacher-signs do they build their meaning?

Clearly, as interpreted by the children and as intended or not by the teacher, these signs permit or restrict the kind of relationships possible. They allow children into the teacher's personal and professional space or decisively define the dimensions in which that relationship can occur.

> [Can you be friends with a teacher?]
>
> > Bonnie: Yeah! I like teachers that want to be your friend plus teacher-in-class.
>
> [Can teachers be both?
>
> > Yeah. I think they should be able to do that, instead of being strict all the time and the only time they talk to you is in class, and if you say "Hi!" to them on the street and they just ignore you....I don't like teachers like that.
>
> [Are there some that do that?]
>
> > Yeah. Some in Toronto, I didn't like them. Out-of-class, they would say, "Hi." But they wouldn't smile like you'd really like them to do...like someone who says, "Hi!" to you and when _I_ say "Hi!", I smile.

The "look" on a teacher's face is one of the most important indicators that the children have. From this, they form a perception of their own standing with their teacher.

Although the statements below were given by the children during individual interviews in May, they have been clustered because they were arose from similar questions.

> [Can you tell if your teacher is happy when she comes in in the morning, even before school starts? Can you tell what mood she's in?]

Marie: She is always smiling. She says stuff really nicely. Like her voice would sound nice.

***

Marnie: Hmm.If she's smiling, that's good.If she's walking fast and you can really hear her footsteps, that might mean she's mad.

***

Roxanne: She feels kind of sleepy because she has to work hard, stay up all night, correcting work. She has bags underneath her eyes sometimes. And then she might get mad sometimes if the kids do something bad. Then she's yelling and getting frustrated.

***

Carmen: Well, I can tell by the way she looks and by the way she talks to people...Well, she's always going like this...{pushing her own bangs back}...pushing her hair back. Sometimes, it looks like to me that she's getting angry. Or she's not feeling very well.

I start getting nervous because I don't like my teacher to be away and I don't like having substitutes.

***

[How can you tell whether your teacher is going to have a good day? Or not?]

Lisa: When she comes in the morning, and goes like this: {crushes one hand with the other}, I think she might have a hard time....When she goes like this: {chin resting in her palm as she sits at her desk}, she's going to have a good day. When she goes like this, {head raised, eyes wide, then chin tucked in} it means she's surprised that everybody is sitting quiet for a change.

***

[When you see your teacher with her hands folded, what does it mean?]

> Sarah: That means she's waiting. {Demonstrates with hands folded across her chest} Like this is waiting. {Demonstrates a tighter grasp on the forearms}: This is a bad day. {Places hands on hips}: And this is a bad day.
>
> {Places hands loosely joined in front of her): And this is a good day. And she'll have a smile not a frown.

***

[How do you decide what mood Mrs. Wayne in? How does it show?]

> Danny: I can't really tell. I just sort of _guess_. Like if she just got mad at the class and I'm having trouble, I _dare_ not go up to her and ask. Like, if she explains something to the whole class, and I still don't understand it. And she explained it again and I _still_ didn't understand it, I dare not go up to her. Because _three_ times is kind of... she doesn't like to explain something _two_ times, but _three_ times...ngh!NGH!...she won't do it!

I was curious whether the children could use the video clips of activities in their classroom to predict what their teacher would do in any given scene. I preselected scenes and close-ups and stopped them ("froze the frame") at point _prior_ to a decisive action or statement by the teacher. I showed enough of the clip to each child to set the context of the scene but gave no commentary about it. The video clips used were filmed some seven months earlier so memory of the details of the event was unlikely.

[Before I show you the next scene on the video, what do you think Mrs. Wayne will do now?]

Cheryl: Get mad at them for talking.

[Let's see what she did do...]

Oh, she said, "Ready?..."

[So she didn't get mad at them this time?]

No. She doesn't always get mad.

[Why is it suddenly so quiet in the room?]

Because the kids are waiting for her to start giving the test!

***

[What do you think the teacher's thinking here?

Don: She's kind of mad...because the way her face is, and you can hear what is going on....No! She's not mad. She's just telling the class some instruction.

[So sometimes, you can misjudge how a teacher is feeling?]

A little bit...

The fluidity of expression on a person's face makes it difficult to determine with any precision what it is that we think we see in a person's face. As interrelationships are established, experienced, and fade, the expression of the face (the signs across the face) continually change. Catching the meaning of these signs: feelings, thoughts, or potential actions, improves with contact with that individual but can never be consistently predicted. Children in the classroom are constantly required to make an assessment of their teacher's expression (as indeed she is of theirs). That there is no definitive interpretation is indicative of the human interaction. For children, the challenge is to sight the teacher's expression (which may be very fleeting indeed) and to interpret it in the context of the moment.

The observing child has no clear indication of whether the expression on the teacher's face is a private or public message, whether it is directed to a specific child or to the class as a whole, or whether it is a signal to be attended to or not. Yet the child is required to monitor, assess, respond or not respond, to his teacher's expression. Those who manage this best gain because of their ability to create (in return) an acceptable image of appropriate classroom behavior and attitude. They are able to respond appropriately and quickly to the nuances of teacher expression. However, as Don's comments emphasize, this is no small challenge. The rapidity with which these expressions can change and the adaptability with which the children are expected to respond, necessitates their continual checking and self-correction. Clearly, the children's relationship with the teacher is not static but takes its shape from everything that occurs in the classroom. Nonetheless, expressions on a teacher's face may be a critical reflection of the status of that relationship.

In an attempt to identify more precisely what semiotics of their teacher's face the children were responding to, I asked a number of children to "act out" certain teacher scenarios that would involve facial expresssions and actions.

> [You are really pleased with someone's work.]
>
> > Maria: [grade one]...{pretending to be at the teacher's desk and looking at someone's scribbler: leans her head to the left, right hand rests alongside her cheek and gives a wide smile}
>
> ***
>
> [Shelley, will you show me a kid who is really being scolded. The teacher is just giving him heck!]
>
> > {Giggles and looks to camera} How should I do that?! {tucks both hands under her chin}
>
> [Maybe I'll scold and you react. Okay?] {scolding Shelley as if I were her teacher} I am really disappointed in your work. You know better than that.]
>
> > {Wide-eyed look to camera (teacher). Tucks chin in and gives a stiff half-smile. Cupped hands at chin level. Says nothing.}
>
> [I didn't think you were going to do that kind of thing.]
>
> > {Tucks her chin still even further into her neck. Cupped hands now move over her mouth. Eyes are in upper position, just visible under her bangs. Left hand slowly raises toward her nose. [A protective gesture?]}
> >
> > {We both laugh at her "acting", but I am very impressed}}

During this melodrama of a teacher's scolding, the fluidity of Shelley's nonverbal expression points out just how meaningful each word and gesture from the teacher is for the child. Each one "stand for" a dimension of the teacher's interpretation of the child and the message _is_ understood. Similarly, each gesture or expression that Shelley gave to the teacher in response to the teacher's words and gestures could be interpreted symbolic. But the point to be made here is that (even in this pretend-situation) the potency of the teacher's word and expression as it affects the child is unquestionable.

The Semiotic Importance of Eye Contact

Just as the unacknowledged raised hand can carry the implication, for the child, that the teacher do not want to "know" him at this time, eye contact with the teacher can "let" a child into the teacher's pedagogical space or deny him. There is a curious dichotomy in the power of the teacher's eye: all-seeing or all-not-seeing.

> Carmen: Teachers are taller, and if they re looking straight forward, sometimes they can look out of the corners of their eyes.
>
> ***
>
> Danny: It's easier to work with a smaller group than a larger group because there are less people to talk to. You don't have to

> talk as loud and you can "keep on eye" on them better....You can watch them.

[What do teacher watch children for?]

> Like she watches them for the good work, and not talking to their neighbours, and for being good, and stuff like that.

When a teacher says to her class, "May I have your attention?" she is using but one of many techniques for drawing the eyes of the children to a focal point. "May I have your attention?" implicitly means that she expects an obliging response from the children insofar as they will (at least for the moment) put aside whatever else they are involved with and direct their eyes and their attention in her direction.

Because she anticipates a prompt group response to such a request, she easily spots (much as a policeman skilled in traffic infractions does) any who do not respond. Invariably, she calls the transgressors by name, drawing them into the circle of attention so that they might together begin a pedagogical relationship.

> Mrs. Wayne: I just have to give Brian and Christopher a "look" and they know exactly what I mean. We don't have to discuss what they have done or why they should be paying attention. One "look" from me and they'd better stop. I haven't time to make an issue out of it. And I don't want to interrupt the lesson.

But sometimes, children want to escape the teacher's all-seeing eye and turn to their private concerns. But in doing this, they take care to cover the "signs" of what they are doing.

> Nancy: We like to pass notes. But we don't want Mrs. Wayne to see us. Sometimes I write a note inside my desk. Then I put it inside a book and give it to Cheryl. Mrs. Wayne doesn't know. When Mrs. Wayne isn't watching, Cheryl takes out the note and reads it. Then she writes one back. Puts it in the book and passes it back to me.

The girls might be more than a little surprised to learn that Mrs. Wayne sees far more than she admits to and often governs the announcement of what she sees by the effects that announcement might have on their pedagogical relationship.

> Mrs. Wayne: {referring to a clean-up period one afternoon} They know they're not supposed to have paper airplanes in their desk. I've been tearing them up and putting them in the garbage.
>
> I hate doing it. Every time I tear one up, I think "Ahh..." (softly) If it was my airplane, I would probably cry. But it's gotten to the point where it is just getting out of hand.
>
> During clean-up, Don's airplane fell out of his desk. He looked up at me, then quickly grabbed it and hid it behind his back. I knew it was there. I knew a couple of the other kids knew he had it because I heard them whispering.
>
> And yet, I couldn't go and take that airplane and tear it up for him. Somehow I figured: Don needs that. It sort of gave him a little boost--like, he got away with something. His face lit up...and he got up and put it back in his desk.

It is obvious that there is a discretionary aspect to the teacher's explicitness in her relationships with the children. Teacher and class appear to work on a mutual appreciation of each other's vulnerability.

Children's Empathic Understanding of Their Teacher

As Sarah described in the incident when Mrs. Wayne accidently got a staple in her finger (infra:105), the children have an empathic concern for her.

> Sarah: We were quiet so that maybe her pain would go away.

It is important to recognize that the only sign that the children have to concede to their teacher is their behavior.

> Marnie: So we behave good. Because you don't want to make her get madder. We sit in our desks with our hands folded over and we don't get out of our desks.

***

[When somebody is being a nuisance in class, and Mrs.Wayne has said "Stop talking, please." or "Be quiet."or "Pay attention."...how do you feel?]

> Sarah: I feel that she's talking to me. And when she points to them...(She knows it's rude, but she tells them}...and she says... like when she went to Shawn, she went like that: {points sharply and repeatedly on the desk and speaks in rhythm with the pointing},"You get to work, right now!" And I felt mad at Shawn because he wasn't doing his work, and giving Mrs. Wayne a hard time...I want her to have a nice day.

Circling around the issue of facial and body expressions as indicators of semiotic relationships, I asked the children how the teacher could tell what mood they were in.

> [How can the teacher tell what mood the kids are in? She's just come in the door.]
>
> > Marnie: If they're talking, it means: they are not mad at anybody.
>
> [What might give her some hints about whether you were having a good day or not?]
>
> > Well, if I wasn't having a good day, I wouldn't be talking to anybody. I wouldn't have a very happy face. I would have a frown here {points to her forehead.} And my eyes would be like this. {squinting} And my mouth would be straight or going down.
> >
> > {We both laugh at her unhappy-face-making.}
>
> [Now if your teacher looked at you and you had that face on, what do you suppose she would think or do?]
>
> > She'd come and see what was the matter. She'd say, "Why are you in such a bad mood?" And then I'd tell her.

There is a remarkable, although not unexpected, similiarity between the teacher's facial expressions of pleasure, satisfaction, anger, disappointment, and frustration and the children's description or enactment of their own reactions. Although it is extremely doubtful that they ever talk to one another about this continual exchange and adjusting to each other's semiotic portrayal of their inner feelings, there is no question that there is a sophisticated and ongoing interpretation that, in turn, creates their immediate and subsequent reactions. If there is a surprise in the analysis of the children's comments, it is that they "process" the teacher's semiotics with such accuracy and astuteness. As the following example illustrates, there is a dialectical accumulation of nonverbal meaning between them.

> [In this video scene we see Jimmy and Matthew coming up to Mrs. Wayne at the front of the room. Why do they do that?]
>
> > Don: She can tell them how to do their assignments. But we can't do that any more. We have to stay in our desks. Because she found out that there was too much talking; people getting up, shouting out. There's too much of that for her to teach.
> >
> > There's another problem too. She doesn't like that because there are so many people gathered around her all the time. They just keep coming and asking questions. But now, she can do one-at-a-time because there's not going to be any people coming up to her and bothering her. Like, they put up their hand. It will be easier. She can get one-at-a-time without having everybody wanting her at the same time.
>
> [This scene suggests that the teacher is very busy. There is always somebody who wants her help.]
>
> > Sure...Here comes Adele...Tony... Oh, there's Roxanne. Well... maybe she needs help but sometimes she just goes up anyway.

Again, one is struck by the terminology of the children and their sensitivity to the teacher's feelings as they perceive them. The words "bothering her" suggest that Don is aware of other dimension in the children's needing and requesting Mrs. Wayne's help (as they stand in line beside her during a class assignment). He senses that the demands presented by many children may create an overload on her ability and endurance to answer their needs. "Bothering the teacher" may be an insightful awareness determined by her stance, gestures, facial expression, and attitude as much as by her words. Don reads in these signs that more is being asked of Mrs. Wayne than she can give at the moment.

While observing in the classroom, I could not help but become aware that the line-up is (at least in part) a group reaction. It becomes a kind of semiotic synthesis. The line-up is a sign of children waiting for the teacher, to be with the teacher. Some children join the line-up not because of an academic need but because of their need to be like the rest of the class, to participate in a group activity (a designation that the line-up takes on as more and more children join it). Others may use this opportunity to play a subtle "hooky" by assuming the appearance of a legimate need. As the line becomes longer and longer, it is obvious that Mrs. Wayne cannot possibly attend to each request.

Often the teacher is the last one to realize what is happening, then abruptly terminates the privilege of coming for help on an individual basis. Her tone, attitude, gestures, and language often implies that she is annoyed at not having "caught on" to the game earlier. Unfortunately, when this opportunity is terminated, a number of children with legitimate needs are "cut off" with all the others and may feel cheated from a justifiable claim on the teacher's attention. As the teacher halts the line-up, the children's attitude shift from a genuine (or not genuine) solicitation of the teacher's guidance to a resentment of being deprived of their "turn" and of being caught-up in the seemingly inevitable re-enstatement of more stringent conditions, e.g., "Do not to get out of your desks. Raise your hand if you need help but try to figure it out by yourself. Keep on working until I can get to you." The shifting semiosis changes the character and quality of each child's relationship with the teacher.

One final example of the children's perception of their relationship with their teacher describes the role some children will assume to help their classmates and, by this action, help their teacher.

> [This video scene shows that the teacher is not the only one teaching in the class.]
>
> > Tony: Well, Denise knows how to do it and Paul behind her doesn't, so she's helping him. But we can't do that any more either... because we have to put up our hand and get the teacher to help us. But some other kids can ask if they can be helpful--try to help other people. Mrs. Wayne says, "Yes. It's okay to go around helping."
>
> [Oh, this is interesting. Denise was helping Paul, then Mrs. Wayne came to Paul's desk.]
>
> > She decided to let Denise do her work or she would help Paul instead.

In "reading" Mrs. Wayne's changing role in the classroom, Tony decides that the main reason for Mrs. Wayne's coming to assist Paul was to free Denise for her own work. This is probably the "truest" interpretation of the scene. However, other possibilities may be inferred. The sight of one child helping another may signal to a teacher that her attention is needed there (as appears to be the case in this scene). Or the child helping may not be able to help (which is highly unlikely here because Denise is one of the top achievers in the classroom). Or the situation may underline for the teacher her inability to meet the needs of each child every time (despite the unreasonableness of such a reflection). Finally, the teacher may interpret the situation as an exchange of casual conversation rather than learning assistance.

Any connotation we may assign to the experience remains ambiguous without the input of all four people involved: the student needing help, the one offering it, the teacher, and the observer. The value of this brief video scene is that it points out the complexity of interpreting any scenario observed within the classroom. Yet when considering the examples given here and in the following sections where Mrs. Wayne describes her inerpretations of the children, it is apparent that a considrable amount of classroom time is invested by teachers ad children to assess the status of their relationship with one another. That they use semiotic analysis is inevitable

The Implications of Being "Called" by the Teacher

The most obvious way to communicate with someone in a large group is to call a person by name. Teachers acknowledge a child's willingness to participate or his request to participate by saying the child's name. That name is a sign in response to a child's raised hand, verbal indicator, or eye contact. That naming now becomes an invitation for further semiosis--a giving of permission and priority. The ritualistic symbolism of having a name as recognized by religious or ethnic ceremonies of name-giving and by legal documentation is blurred into a matter-of-fact convenience, a way of ordering communication by acknowledging a certain individual or by differentiating between a number of persons.

For a child, how the teacher uses his name can have considerable semiotic significance. It can be much more than the simple calling of a name. For some children, the teacher's routine of naming a child to answer a question or to expand upon a point under discussion takes on a personalized meaning that is often only implicit. When children talk about their feelings about their name, other meanings come to the fore.

> How do you feel when it's your turn to answer in class?]

> Roxanne: I feel like...embarrassed...because I don't usually say anything out in class. I usually just talk to the teacher.
>
> [But if she asks a question and then calls your name?]
>
> Well...everybody looks and you and they do ... {demonstrates turning in her desk and giving a full-faced look at the person asked} ....looking at you. It kind of makes you nervous and scared. Like your answer might be wrong, and everybody will probably laugh at you...because you got it wrong and they knew the right answer.
>
> [Sometimes, Mrs. Wayne says, "Does anybody know...?" Would you put up your hand or not?]
>
> Hm. Sometimes. But not very often.

For Roxanne, being "called" means to be forced into the limelight, to speak regardless of her own inclination, and to risk exposing her lack of knowledge or sophistication. It means that she will be judged by her peers. Being called risks her being mocked for ineptness or even stupidity or for being wrong when the intent of learning is to make her "right". Her own name now places Roxanne in the centre of everyone's eyes. They "see" her in all her implicit nakedness. They wait and they judge.

The sound of your name pulls you from the neutrality of the group into the isolation of the individual. It is a semiotic magnet that pulls you out of your own "time" and thought to command your relationship with all others. For children like Roxanne, and for all children at some time, this naming is a dislocation--a precipitous "calling-for"--that may not be welcomed, may even be feared. Why else do children (and adults) count the number of persons "ahead" of them in an around-the-table discussion or in a line-up except to know when one will be called. Being called, with no way of knowing the moment, contracts time and context. It swirls one from being a listener or a spectator to becoming a solitary speaker or participant.

> [I notice that Mrs. Wayne calls people by their name, when she wants them to answer. How do you feel if that happens to be you?]
>
> > Carmen: Sort of nervous...I pull my hair.
>
> [You just put your hand to your chest and gritted your teeth. Why do you feel that way when the teacher calls your name?]
>
> > Like most of the time, you're pretty good and now the teacher is talking to *you*. (You know, *me*. I'm pretty good.) But now, teacher's talking to *me*. You sort of get scared.
>
> [Scared of what?]
>
> > That the teacher was calling your name...that you might get something...that something might happen to you.
>
> [What could happen?]
>
> > Well right now, if you call out too much, you get your name on the board. If you get a few marks beside it, you have a D.T. [detention]. Five marks, you get your parents phoned; six marks, school suspension. Sort of scarey, you know, when she puts your name up...(shivers)
>
> [How do you know when you are getting close to the point when you could get a mark against your name?]
>
> > When she starts walking to the chalkboard and grabs a piece of chalk. "Oh no!", you know.

[It *could* be you?]

Right!

Just as Roxanne fears the sound of her name because it demands her participation, Carmen fears the mark against her "good" name. "You know *me*, I'm pretty good." Without the mark, her name stands in place of her goodness. Mrs. Wayne describes Carmen as "Quiet. Good student. Smart...and delicate." The few chalk marks of her name on the blackboard could take that all away from her. It would sign that: "*Carmen* is not quiet, not a good student, and not very smart if she gets herself into trouble like that." But in Carmen's words, we also hear that the act of being named for a detention has one implication--the *fact* of her misbehaviour--(although she may well consider such naming an injustice). However, the anxiety of knowing that this is always a possibility taints her security from moment to moment: Does the teacher name me as an invitation to contribute or as a censure of "something" I might have done? It is the ambiguity of her teacher's intent that Carmen finds "scarey". What judgment comes with the calling of my name?

> Mrs. Wayne: (moving up and down the aisle marking the children's work, turns suddenly) *Matthew*! (the whole class jumps and stops) *Sit down and do your work*! And I don't want to have to talk to you about that again. Sit *down* and don't bother *anyone*!

***

> Mrs Wayne: [in a later conversation about this incident]
> I will often do that on purpose too. I didn't today because I was just frustrated. It just came out! But I don't like to do it. But a couple of times a year, it works. *Everybody* just freezes!

There is no question what judgment befalls Matthew. In this context, his name isolates him as one who not only broke the rules of classroom behaviour but also provokes Mrs. Wayne's displeasure to such a degree that the whole class is shaded in it now. Along with her dramatic annoyance, Matthew suddenly feels the vacuum of his friends' withdrawal and the force his classmates' censure and resentment. At the stringent sound of his name, he is swung from the amicability of talking with his friends into ostracization.

> Mrs. Wayne: {Over the public address system in the school} Bonnie, Marie, and Nathan? If you are in the school, please come to the front door entrance now. The bus will soon be here and we will be leaving for the Museum immediately. That's *Bonnie* McInnis, *Marie* Cherny, and *Nathan* Bjornson. {half sings} Where *are* you?
>
> Bonnie: {coming into the area} That was embarrassing! She called my full name!

[Is that more embarrassing than just your first name?

> Yeah! Because they call me names with it. They say something that rhymes with it.

In a different way from Carmen and Roxanne, Bonnie wants to keep her name in hiding. To hear it spoken publicly (and what could be more public than a p.a. announcement?) is to become vulnerable. It is a reminder to others that some "play" is possible with the sounds of your name, with your personal sign, with you. It wounds because you are helpless in stemming the chain-reaction that bats your name around like a basketball out of your reach. You have no way of stopping the play or knowing what direction it will take, how many will "go over" to the other side, or how many "scores" will be made against you? Name-calling, in its negative sense, takes your name from you and makes it public property. What is finally return is soiled, abused, less than it was when you held it.

The semiotics of a child's name, as it used by the teacher, is complex. Not discussed here are the implications, (for the children themselves) of two or more children having the same first name, of the effect of the teacher arbitrarily substituting a nickname for one of them to differentiate between them, of her frequently forgetting a child's name, or repeatedly mispronouncing a name.

The taking of attendance--the calling of each child's name--signs to the teacher, the class, and the individual that the child is "present" and "accounted for". It is a beginning. *Now* pedagogical relationships may begin. Should a child's name be overlooked in the calling, the protest is immediate, "You didn't call my name!" It is as if: "If my name is not called, I am not called. I am not "seen" to be here. Call me! Then I will exist." What that existence grows to be during the school day will depend a great deal on an implicit semiotic favour giving to a child's name, on how the sound of his name rings in the classroom: with recognition, indifference, or praise or with anger, impatience, or censure. What's in a name? ...A whole pedagogical world.

Raising Your Hand: Semiotic Permission or Denial

The traditional way of making yourself known in the classroom is by raising your hand. The effectiveness of this sign is premised on the teacher recognizing it when it is given and on her giving recognition to everyone on a fair and consistent basis. As the children talk of the art and meaning of the raised hand, itbecomes obvious that there is an intricate code associaed with this practice. Raising your hand is to draw attenton to yourself, to request assistance, and to move the teache from a communal space into your personal space. The had raised is a signal to the teacher that the child would sparate himself from those who do not raise their hand. It bds for the teacher's sign in return, for the beginning of arelationship. The teacher's semiotics control whether that rquest will be recognized, fulfilled, or denied, and whether the gesture will be treated matter-of-factly, kindly, abruptly, if at all. In the end, the teacher's sign will determine whether the child's gesture is be accepted as a contribution to the momentum of classroom life or regarded as an interference.

> Kathy: When we put up our hand, Mrs. Wayne comes over and asks us what we want and then tells us. Or sometimes she helps us with the answer and helps us figure it out. Well, most of the time she does. Sometimes she doesn't.
>
> Do you have to wait very long before she gets to you?]
>
> Yes!
>
> [What do you do in the meantime?]
>
> You just sit there - {puts up her hand straight up} - and you wave it around. {waves it} And sometimes when you're getting tired, you just go like that {hard waving}. Your arms are getting tired of just standing there and waiting for Mrs. Wayne to see you.
>
> [Does she come to you if you start extra-waving?]
>
> {laughs} Only sometimes. If you're waving your hand hard, she'll say, "I can see your hand. Just wait!"

Hand-signals to the teacher come in a variety of styles and expression. It would appear that there is also a spatial differential involved. Sitting up straight in the desk signals that the child is "in his place". The deliberateness of the pose separates it from the more casual posture typical of a child sitting in his desk. As the urgency of the hand signal grows, the child leans away from the back of the seat toward the teacher. Some lean across their desktop at a most precarious angle; others kneel on the seat to better extend their bodies towards the teacher. It is as if the children are signalling: If you do not come to my place, I will s-t-r-e-t-c-h into yours. But the children do remain physically attached to their desks, for to go to the teacher would break the rule of "Stay in your desks." and risk their being denied the teacher's help and approval.

Further, as Kathy says, the children do nothing in that interval but wait for the teacher's recognition of their request. For them, pedagogical time is suspended. In this one physical gesture, all semiosis stops. The child does not interact with his "work". He holds time just as a traffic policeman might to stop cars on the highway. This may explain the urgency with which teachers respond to the children's signal and the agitation some teachers feel when many hands are raised. These hands represent more demands than the teacher can meet and until those demands are met no learning is taking place.

Danny describes the intricate coding system that underlies the gesture of raising your hand and the etiquette that governs when, how, and how long children persist.

> [Let's talk about being in groups. How does it feel to be in a big group like this? There are twenty-seven kids in your class.]
>
> > Danny: Big group! Uguu! It is a pain in the neck! Cause there is.... Let's say you are having trouble, and you are looking for Mrs.

> Wayne, and you see all these hands sticking up...Ugh! You say, "I don't think I'll bother Mrs. Wayne."

[The way you moved your hands just now, Danny, you made it look like you were in a forest with these trees all around and you were covering your eyes!...So, sometimes it is just "no use"?]

> Right!

[So what do you do then?]

> Mmm....I just probably skip the question and go on.

[Do you sometimes try to get Mrs. Wayne's attention if you are not really, really stuck.

> Mmm! Sometimes, if there isn't that many hands up still. I could probably figure it out. I'm stuck but not really, really stuck!

[When would you go up to her and when do you not go?]

> When she's at her desk. Hmm...but she just might tell you to wait for a second. But it is better to go up to her desk when she is at her desk instead of putting up your hand. That's what we do in creative writing. We don't put up our hands. We go up to her desk.
>
> Instead of...when she has to walk all the way around and go over, and in that time, you might have already figured out the question.

It is virtually impossible for any teacher to respond immediately or even consistently to a child's raised hand. Other contingencies claim priority: another child's complicated needs, time constraints, interruptions from outside the classroom, or the sheer number of children requesting her attention. This may create problems for the child who is not noticed or not recognized.

Mrs. Martiniuk, a grade two teacher, was very disturbed when she viewed a particular video clip. It showed Jason who sits in the front seat by the far wall raising his hand and holding it up, as she marked other children's work. A close-up of Jason's face, as Mrs. Martiniuk comes closer to his row, shows his excited anticipation that his turn will come soon. But Mrs. Martiniuk doesn't see his hand or has noticed someone else's as a priority. As she walks towards Jason's row but passes him to see someone several desks behind him, Jason's face is a blur of confusion: She didn't stop at my desk!? He turns in his seat and watches her. A frown repeatedly flits across his face. He raises his hand again, holding it behind his head with the other hand. He leans back into it. But Mrs. Martiniuk hears a knock at the door and quickly goes there. Jason slumps but keeps his arm raised.

Mrs. Martiniuk returns to his row and checks the work of a girl behind Jason. Jason looks over his shoulder with a hopeful look on his face. His hand is still up. Mrs. Martiniuk glances at the clock and realizes that it is time for recess. She moves quickly past Jason again, goes to her desk, clears a corner and asked the front-row children to gather the children's worksheets and place them on her desk. The bell rings. Jason's hand is still raised and his lower lip protudes. He is one of the last to leave the room for recess.

Not unexpectedly, the video zoom lens saw more in this situation than Mrs. Martiniuk could. In the "forest of hand", as Danny describes it, she simply did not "see" Jason's hand as distinctly different. That her inadvertent oversight should so upset Jason made her feel uneasy about not meeting his needs. The incident does illustrate how important the raised hand may be for the child. It also dramatizes the challenge that each teacher faces in dealing with a large class where individual needs are many and varied.

Several months after her earlier comments, Kathy also appears on video in a class activity scene. In the midst of all the bustle of children working on an art project (getting materials and consulting with Mrs. Wayne by walking up to her quite informally), Kathy is conspicous by her persistence.

As the clip shows, Kathy is maintaining the classical posture of sitting up straight in her desk and holding her arm fully extended in the air. It has been a long time since she first raised her arm. Her eyes shift from side to side but no one notices her--not the teacher nor any of the children. She lowers her arm slightly and sits very still. Then she lowers it completely. Slowly, she leans down to look into her desk. She pulls out a notebook and opens it carefully on her desk. She smooths its pages. No one pays her any attention except the camera but she gives no indication that she senses it is focused on her. Slowly she begins writing and doesn't look up. Others move about the room, pass by her desk, and talk to one another. Kathy writes on.

How long Kathy will persist in raising her hand to solicit Mrs. Wayne's attention may well depend on how often she is thwarted, how strong her own sense of propriety is, and how urgent her need is. For this particular time and circumstance, it did not serve as a sign. It simply did not signify. No one acknowledged its intent.

The sign of raising-the-hand originated in a context of total teacher control. It now seems irrelevant in a classroom where interaction with the teacher (at least in some lessons) is more spontaneous and informal. Is there something lost for Kathy when the sign she had been taught to give is no longer honoured? Among so many who do not, why does she still expect the indexicality of her hand to elicit the teacher's response? Surely she senses that by holding to this ritual she deprives only herself. Or does she announce in this gesture that she is on the side of the teacher's rules? That she (perhaps alone) is compliant? Good? Is this more important to her than the actual teacher's response? Does she look for approval from her classmates as she looks around? What does she draw from their indifference? Or is she like a child now wearing high-buttoned-boots, an anachronism?

When the rituals of classroom behaviour change, does not the relationship between the teacher and the children change as well? What relationship do Danny, Jason, and Kathy hold with their teachers? How much of the relationship is influenced by their observing or circumventing the traditional "raise your hand" request? What are the signs they must "read" to know when and with what seriousness that gesture is required? Jason's perplexity may not be an isolated "chance shot" on the video. It may well reflect the ambiguity that other children sense in this strangely shifting rule. The raised hand means that a teacher can "let" a child into the teacher's pedagogical space or deny him. For the children, it is a reminder that the teacher holds ultimate control over their learning. It may justifiable lead them to question what is "fair" and how it is that other children gain access to their teacher's circle-of-attention but they do not?

The Semiotics of Marking Children's Work

How the teacher relates to the children and how they perceive their relationship with her has a great deal to do with how she relates to their pedagogical efforts and the tangible evidence she leaves of her assessment on their "work". On this work (composed of signs) she leaves signs of her own. This symbolic confirmation is something that the children can take away with them, share with their parents, or simply know that, through a sheet of paper with the teacher's marks and remarks on it, they have established an ongoing relationship with her. As much as eye contact is important to acknowledge a child's presence in the classroom, the teacher's check-mark is her acknowledgement of the child's efforts. This marking is tangible, objective, and relatively impersonal. It comes from the "rightness" of things--from an implicit order of the world. By the teacher's sign on their work, the children know that they too are in harmony with "rightness" or that they must make adjustments to earn that "rightful" place.

> [How do you think teachers know that the children are doing good work?]
>
> > Marie: Well, she say, "Marie. This is good work." And she says, "It's good work." Sometimes she says, "Excellent! This is excellent, Marie."
> >
> > Sometimes she puts on your test: "Very good" or "Excellent" or something. Or she checks it. I like the checks best, because she is checking all of it.

The connotation of "work" is very strong in the children's statement about why they come to school. Most regard their "work" as serious and important to them now and decidely so in the future.

> > Adele: The teacher's supposed to teach people how to do things, to help kids learn to do math and science. That's what a school is for--learning.

***

> Don: A school is something that kids learn in, and work in, and have fun, and do certain things.

***

> Andrew: We do questions. Hard questions that you have to do when you grow up.

When children mark their own work, certain ethical decisions confront them. Because classroom prestige is so strongly associated with "being right" or "having them all right", the temptation to mark any answer correct is almost irresistible. If the illusion of being right can be created only by pretending, some children will be invariably tempted to do so. Their decision is of the moment. We can do no more than guess why a child marks an incorrect answer right. Because he wishes willfully to cheat, to fool others of his ability, to challenge the possibility of detection, or for the devil-may-care attitude of it? Who is to say? We can only recognize the temptation.

However, it may be that for the children the semiotics of marking is a complicated process: a synchronization of listening, "checking", and marking, all in time to the pace of the teacher's voice and pauses. This may simply be too difficult for some children to follow. Despite their best intentions, they get "mixed up". Even Mrs. Wayne finds marking a challenge.

> Mrs. Wayne: I find marking math that most

> difficult, no, the most frustrating. It takes forever. You have to mark each number so carefully. You have to find where they went off. In this last test, there were thirty-four questions, but each one has eight parts ...times twenty-seven kids. It is almost impossible to mark it completely. And I always thought that by the time they get to grade four they could mark their own work, but I have found that they mark them but you could take them in and they could have them all wrong. They could have every single one wrong and they would have every single one marked right.

Despite the problematics of the marking process, it remains one of the most consistent and powerful means through which teacher and children can communicate with one another. The work the child presents is a sign: This is what I am doing, how I am thinking. Am I right? The teacher's response must be to accept or refuses to accept that sign.

What is in this teacher's mark?--a sign of the person's effort, ability, accuracy? His status in the classroom, a projection toward his report card? A sign of inability, lack of effort or concentration, carelessness? What is it? Is the mark a boundary that divides or one that unites? Is it an elevation of commonality or a designation of uniqueness? The dictionary tells us that a mark is a visible trace, impression, or figure on something such as a line, scratch, spot, or dot. Further, that it is a letter, number, or symbol used to indicate achievement, quality, defect, etc., as of a student's work.

It is also a goal to which effort is directed to attain a certain standard or recognition. Interestingly, there are connotations of the children "making their mark" on the teacher, influencing or impressing her in one way or another. They hope to be "worthy of the mark" and attract favorable notice. Some children are concerned whether they are "up to the mark", sufficient in standard and worthy of recognition. Others may worry whether they fall "wide of the mark", landing far from where the teacher explicitly and implicitly expects them to be. Some will earn their "mark of distinction"; others will fall "short of the mark". Both will become "marked", singled out for their achievement or for lack of it. The mark becomes a pivotal sign that determines which direction they must go, under what conditions, and with what probability of success. Marks given to children mark them too.

> Don: Kids can learn out of their questions. When they are all finished, when Mrs. Waynes takes them to check them, she'll know if they know these things. So if they don't, she'll teach them and tell them how to do it.
>
> Like, if they get a whole bunch wrong... if it's only one or two, she knows that they pretty well know, but if there's more than that, she knows they need to learn more about that, about all those things. Even if there's one or two wrong, she'll tell them how to do it. She'll help them.
>
> It doesn't count if you have some wrong. You

> have to try your best while you're doing these things, but if you can't do them, she's not going to be mad at you or anything. Because on these things, she's just trying to find out what you're having problems with, so she knows.

As with athletes, the children are "on the mark", each mark a starting line, a projection into the future.

> Cheryl: Oh, it's very important to learn to read. When you grow up, most places that you work at have reading. You have to be able to read a whole bunch of stuff.
>
> ***
>
> Paul: You can't wait until you are grown-up and then learn. It's very hard to learn once you're grown up because you don't have very much time to learn. Kids aren't as busy as adults because kids don't have hard things like adults do usually.

In this context of learning, even such a simple exercise as marking basic facts in multiplication and division, can have waves of meaning rising from it. It is a visible indication--an index to others--of a child's achievement, success, diligence, effort, or the corollary of each and all of these. This marking is no simple thing. In its very marking, it marks who each child is and why.

This marking does not subside but is an integral part of the school child's life through all the grades and beyond. This marking accumulates and draws the profile of the child without detailing fully the circumstances, intentions, or life's demands that underlie the mark. Ultimately, it carries no trace of its source and alone "stands for" the child. The mark becomes important in and of itself.

> Andrew: Lots of things are preparing for the school tests. Because if you do ordinary work, Mrs. Wayne doesn't know how you are doing. She can't grade you, like 100% and stuff like that. Say you are doing 100% on all your sheets, then when you go to do a test, you won't be able to get 100%. That's for sure!
>
> You have to start lower and you work up higher and higher. You work up from last year's math and you work up to grade five math. You built on your grade three and then you go to grade four level and then you go up to grade five level. On the test, there is just a few lines, all on one page.

Whether the results of "just a few lines, all on one page" are interpreted as a number, letter, percentage, stanine, or symbol, the mark stand for the individual. Though we would deny it, the transfer is inevitable: 75%?..the person is 75% accurate? Or is it that: 75% of the answers were given accurately? The distinction becomes blurred and ultimately and not too subtly irrelevant. The mark and the individual become inseparable. In the end, the person is 75% of the negotiable worth against whatever criteria is set. A strange transformation has taken place: because the mark is a visible trace on paper, it becomes an object. It is not meaningful without the individual. Until it is a sign with a designatum, it is not a sign for someone or to someone. So the mark must be superimposed upon the individual to become meaningful. Once it is, we rarely see beyond the veil of the mark to the person standing beneath.

The mark becomes the measure of the person but that measure can only be made through comparison which in turn puts the individual's value at risk. In the hands of the teacher, the mark is simultaneously a powerful tool and a powerful weapon. How it is used tells us a great deal about the pedagogical understanding the teacher brings to the children. Marking also reflects the ongoing debate: marking achievement of the self or achievement compared to the group? Is it a index of achievement or of expectations? Whose? It is not surprising then that many children find their teacher's check-mark reassuring. It signifies overtly that the child's work is right. The children (and teachers) implicitly take this mark to mean the person is right, all right. Despite all verbal differentiation, the child knows exactly how he is marked in his teacher's favor, in his parents' eyes, and in his own self-knowing.

I asked a kindergarten girl how she felt when her teacher told her she did "good work". It is very evident that, for Leanne, her mark and the quality of her work are inseparable.

> [How do you feel when your teacher says "Good work, Leanne?]
>
> Leanne: {big smile} Proud!

[Why?]

> Because you've done things right!

[How do you know if a teacher is proud of you?]

> She'll say, "You've done good work!" Once I got my work all right! Two times!

[Good for you!]

> All right! {swings head from side-to-side, pleased with herself}. So I got all check-marks and two stars! {holds up two fingers} Two!

During a sequence in which Narana, a grade five girl, was acting as teacher, she busied herself at the teacher's desk obviously doing something she considers to be important.

[Please tell me what you are doing.]

> Narana: I am looking up the scores where they [teachers] usually put it in. [moving papers] To see what they got on their test.
>
> [leans to marking papers, smiles, marks very quickly and talks to herself softly, moves from question to question, pauses, ponders, purses lips. circle answer (as if wrong). opens book, turns many pages, looks into a page envelope, moves quickly on, checking bottom of page]

This confirmation of the children's responses is an important semiotic in all classroom activities and does not always take the form of a tangible mark. It is implicit in discussions as well. In a discussion with a grade four student about a video clip of a lesson, I ask about the teacher's use of the word "good" after each comment the children made.

> Lisa: She's telling him that it's right, as he's going along. He's telling everything and the teacher is saying it's "good" as he's telling each answer.

Similarly, a teacher's circulating around the room while the children work at an exercise is also an index of her interest, guidance, and accessibility. We had already seen how serious her recognizing or ignoring a given child can be in creating a supportive relationship with that child and how her relationship with that child can affect his relationship with other children in the class.

> [What is the best way for teacher to communicate with kids?]
>
> > Danny: In the work. In the work she gives you and when she talks to you. We have language arts...in there, it's probably the best time to talk to us, because right now, we are talking about children's games. She can talk to you about the things that you do. What games you like to play and stuff like that. And you can tell her the stuff you do. You communicate.

***

> [How do you feel if the teacher is really praising you for something?]
>
> > Carmen: I feel real good. Then also I feel real bad. Because everybody else starts to get jealous and the teacher is giving so much attention to you that she isn't giving anybody else any attention.
>
> [Happy and embarrassed?]
>
> > Yeah!

[How do you know when a teacher is really pleased with your work?]

> Well, most of the time, they will come and tell me that they like what I am doing and they'll tell me I could do better and I'll try better or, if they tell me, "It's just great!", I'll stay what I'm on. And if she says, "You could do a little bit better." then I try my best to improve what I am doing.

[Why is it important to "Do your best."? A lot of times, teachers say that. Parents too.}

> Well, because I don't really want to fail any grades and because I want my Mom and my Dad and my brothers and my sisters to be proud of me because it makes me feel good.

It is here, in Carmen's words, that we come to the criticalness of the semiotics of a teacher's marking. It places the child in a context of a pedagogical achievement that impacts on his relationships with his classmates, his family, and his teacher. It creates an "image of performance" that is superimposed onto the child that others use as a semiotic sign--an index--to assess the value of the child. Just as Carmen's good marks make her parents proud of her and make her "feel good", Brian "forgets" to give his mother his report card. Days later when she learns that they have been given out, she asks Brian for his. Jimmy "lost" his in the jumble in his desk. Mrs. Wayne "found" it and left it in the office for Jimmy's mother to pick up. It is inescapable that the "mark" is a sign of the child and that the child's relationship with his teacher is governed, at least in part, by that mark.

The Fluidity of the Semiotics of Teacher-Children Interpersonal Relationships

As much as it is possible to describe the semiotic basis of the children's relationship with their teacher (and the descriptions here are only a beginning), it is important to recognize that the semiosis that they create between one another is not static. There is of course an orientation period during which teacher and children create, understand, and share particular communicative patterns that are rather unique because of their own uniqueness. Soon, a comfortable familiarity marks their relationship, a similarity of understanding and practice. However, just as language offers infinite alternatives, the relational semiosis between children and their teacher also changes with time and circumstance. Six months after the beginning of the school term, Mrs. Wayne makes the following observations.

> [Do you and the children communicate any differently now than you did in September?]
>
>> Mrs. Wayne: Let me think a minute....I think they are more aware of my nonverbal cues, like eye contact. "Mrs. Wayne is not very pleased with me. She's looking right into my eye. I better sit still. I think she wants me to listen to the lesson."
>>
>> I guess I get a much quicker response from them now. I noticed that yesterday. It was Christopher. I was reading aloud and I just looked at him. It was instant: "Sit still!" He knew exactly what I meant.
>>
>> When I do attendance, for example, I don't have to say as often, "I want you to be quiet." They know it's important."

> I don't do as much explaining. Before, I would say, "Don't do this...because..." At first I said, "You can't talk because it's very important I get your names down on my records and for the absentee-check. Now I'll just say, "Stop talking." I am assuming that now they know why.
>
> At the beginning of the year, I explained almost everything. Why we had certain routines...Why I don't like them to chew gum...Why I wanted a certain format in their books, especially in math. Now I assume, more often than not, that they know. And I'll often bring in: "You know that isn't using common sense. You know that." That's our number one rule, and most of them are pretty well aware. They know that it is not common sense. Then I don't have to go into more explaining.

Where Mrs. Wayne's explaining is no longer necessary, it can be assumed that the children have learned not only the explicit rules that have been laid down to govern classroom behavior and the relationship of the children to their teacher but that they have also absorbed (as if by osmosis) the implicit rules that make that relationship workable over a long period of time. In one of our last interviews, Mrs. Wayne made an interesting differentiation between "school-rules" and "teacher-particular rules".

> Mrs. Wayne: Every teacher that I know of has some kind of personal rule, some little thing that she insists on. It could be the way the children date their notebooks or some funny little rule that she thinks is important. Take me now: I can't stand the kids wearing hats in the classroom. Other teachers couldn't care less. But the kids are so funny. Even when I had some of my grade fours a couple of years later in the choir, they'd whip their hats off because "Mrs. Wayne's coming!"

In a same way that one teacher might accept certain behaviors from the children while another will not excuse them, children apppreciate or are disturbed by certain teacher characteristics. Usually there is some compromise and adjustment. However, children appear to be remarkably "durable" regardless of the characteristics of the teacher who becomes their homeroom teacher. There is an implicit loyalty (my teacher) that lets them forgive and forget. A number of years ago, a teacher's temporary contract was not renewed because of what was judged to be a grossly inadequate demonstration of pedagogical skills and responsibility. Still, the children (not knowing the real reason for the teacher not returning to the school the next term) secretly planned a farewell party and shed a few tears on the last day. Their cards read: "To my best teacher ever!" "Thanks for a great year!" "Wish you could be my teacher next year too."

At one point, I commented that as much as we try to understand the dynamics of the teacher-child(ren) relationship and as valuable as the semiotic perspective is in uncovering some of the critical aspects of that relationships, there will always remain an air of mystery about what attracts one person to another or what prevents a viable relationship from developing. While in the children's and teacher's words we find some of the answers, we must admit that we cannot find them all. There will always be more to the signs between them than observers can interpret.

The Semiotics of A Teacher's Interpretation of Children in Her Classroom

Teacher's Interpretation of Individual Children: Children's Characteristics as Semiotic Descriptors

Mrs. Wayne typifies the majority of teachers who are vitally concerned about the individual children in their classrooms. The difficult task of considering each child as a unique person and as a grade four student in need of particular and specialized guidance is a continuing challenge. As Mrs. Wayne describes the various children in her class, it becomes apparent that she is using all her semiotic skills to create for herself as authentic a profile of each child as possible. She draws information about the child from everything the child does and says and from the complex of semiotics that the child conveys throughout the day. It is not possible for her (nor anyone else) to be definitive about all aspects of a child's life that are relevant to his or her pedagogical experiences. What *is* pedagogically important about the child is not easily set apart from the total child. The child as a pupil is not separate from the child as a nine-year old.

In the descriptions Mrs. Wayne gives during the various interviews throughout the year, it is possible to hear her tentativeness, her concern whether each description does fit the child accurately, and whether there might not be extenuating circumstances which might better explain some of the interlocking influences that create the world in which the child must live. Her understanding of individual children and of archetypical children is important to her in creating and conducting appropriate and meaningful pedagogical experiences for them, and important to educators in understanding more completely the life of young children in the classroom.

At my request (in mid-November), Mrs. Wayne gives her impression of various children in a free-association manner. As she speaks, the play of semiotics in each of her decisions and interpretation is evident.

> [I'd like to name one of the children in your class and have you give your immediate response...three or four words that describe that youngster.]
>
> Mrs. Wayne: All right.
>
> [Tony:]
>
> Bright. Verbal. Blonde. Cuddly. {laughs}
>
> [Nadeen:]
>
> Clingy....She is always sick....(That's hard)...Dark. Small.
>
> [Kathy:]
>
> Bright. Funny. Cute. Glasses.
>
> [Shawn:]
>
> Ah? A monkey! Thus far....Blonde. Small.

[Cindy?]

Sweet. Lovable. Indian....Smart.

[Jimmy:]

...Nervous....Hyper. Very hyper.... Meany.... Problem.

[Denise:]

Bright. Quiet....Ah, pretty. Slow...(as in working)

[Rick:]

Rick? {deep sigh} Slow!...(as in not smart). Heavy. Dark....Messy.

[Adele:]

Messy! {laughs}...Wants to please...Ah, energetic ....and...troubled.

[Don:]

Verbal. And blonde....Persistent....Very well developed morally.

[Rob:]

Rob. Very quiet. Good in math. Reading troubles....Tall.

[Carmen:]

Quiet. Good student. Smart....Ah, delicate.

[Lisa:]

Wants to please....Quiet....Tries....Sweet.

[Bonnie:]

Absent. Reading....Obnoxious. Intelligent.

[Danny:]

Um?...Rude....Freckles...and never in his desk. Always up.

[Paul:]

Quiet...uh? Troubled...Deep...and emotional.

What is particularly revealing (when listening to a replay of the interview and hearing Mrs. Wayne's voice describe the children) is her inflection, pauses, and silences as she searches for the most appropriate descriptors. These signs are as revealing as the actual choice of words she finally expresses. As she thinks about each child and selects descriptors, her manner and voice carry her feelings about each particular child. In some descriptions, the words come quickly and surely. With others, less immediately, more hestitantly. Perhaps the most revealing examples are the first two. Tony: the words describing him come quickly and with confidence. The words describing Nadeen come carefully and with a puzzled tone in the teacher's voice. Other children: like Danny who cause some difficulty in the class or Brian and Jimmy who have problems in learning are described with a hint of crispness, impatience, and despair--a problem she faces but has not resolved.

I have tried to indicate these expressions of emotion by the ellipses included in the transcription. What cannot be caught is the solemnity with which Mrs. Wayne made her choices and her tone of empathy as she spoke of various children. Her caring comes through very clearly on the tape.

I gave some consideration to adding descriptors of my own within the transcription of the teacher's reply but decided that this would interfere with the content of her statements. Further, such embedded descriptors might not capture what a reader might draw from a reading of the transcript. But Mrs. Wayne explains it best:

> [Where do those descriptors come from?]
>
> > I see them in my mind. I imagine the children in their desks. And these words just come. Some of them were hard. A lot of them are just physical descriptions. That is the very obvious thing about some kid. They're so blonde or whatever....For some of them it's just knowing. Like Paul being troubled. I know his background and that is what I see in Paul all the time. Because that is something I've tried to fix. It's on my mind all the time.
>
> [It's not your speculation. You know the circumstances.]
>
> > Oh yes.
>
> [We can sometimes get caught in projecting onto a kid some particular attributes. But this comes authentically?]
>
> > Oh yes. I know!

At the same time that we appreciate the source and genuineness of the teacher's response, it is understood--as it must be in all semiotic exchanges--that there is more in what anyone knows than can be compressed into words. However, while the single words given by Mrs. Wayne are a distillation, they cannot be regarded as less true than extended elaborations. Given the genuineness of the semiotic exchange that occurred, the final descriptors come from the same semiotic cauldron as any other interpretation. During the restricted-answer interview, Mrs. Wayne is describing the children from the knowledge and language at her command. She is creating signs that represent some conspicuous attribute of each child. Some might object to this as a stereotyping of all the qualities of the child's physical, emotional, social, and academic traits into general terminology, e.g., "sweet", "smart", or "obnoxious". It is, however, imperative to recognize that the label does not become equated with the child. The label is _not_ the child. The child is much, much more than any label could encompass. The child is a child, by class, genre, and being. The signs only stand beside the child, casting a certain quality of light upon the child.

The purpose of the exercise was not to reduce the child to a label. It was rather to draw from the teacher's understanding of the child those attributes that are a part of her repertoire when she thinks of the child, when she deals with the child's daily complex of needs, and when she considers the class as a whole. For each child _is_ an element of the character of the class.

As Sperber suggests (1975), the sign or symbol allows us to begin to see what it is we are dealing with. The sign becomes a vehicle that allows us certain perspectives on the matter. Through this process of examination, it may well be that we come to change the sign we have initially associated with the child. As we "see" more or differently, the sign may no longer be accurate. It may shed a false light on the child. It then behooves us to replace such signs with more accurate ones. This should occur not only as we understand more about the child at any given time but also as the child changes through time, as we change through time, and as times change and the signs no longer hold weight to enhance our understanding. Signs chosen to describe children are only avenues to direct our attention to specific needs. They do not obliterate the humanity of the children nor our responsibilities for and responsiveness to them.

When the words Mrs. Wayne uses to describe the children are classified, an interesting pattern emerges as shown in Table 5. However, its full impact will come only if, for each word in the list, a child is envisaged. Beside that child, the designatum of each word. Now group these children and call them your grade four class. Then think of the significance those words would have for you as their teacher.

These descriptors were used by Mrs. Wayne to highlight the characteristics of sixteen of her twenty-seven children. The list does not include repeated descriptors and represents three to four words per child. Even so, and rather dramatically, the diversity of physical, personality, and learning traits for slightly more than half of the children

Table 5 Teacher-Described Children's Traits

Learning	Personality	Physical
bright	cuddly	blonde
verbal	sweet	dark
smart	funny	small
good student	energetic	tall
always reading	wants to please	heavy
intelligent	persistent	delicate
morally well-developed	quiet	pretty
good in math	very quiet	Indian
messy	deep	freckles
slow worker	emotional	always sick
slow learner	troubled	frequently absent
problems learning	clingy	glasses
reading troubles	nervous	never in desk
	hyper	always up
	very hyper	
	obnoxious	
	meany	
	rude	

in the class is obvious. Conceivably if the entire class were to be included, the list could be doubled. As it stands, the list points to the complex demands placed on the teacher, day after day, as she balances individualized and class work. While the learning traits list is formidable in itself, absenteeism and the awesome range of personality and emotional traits compound the challenge. When such an informal conversation can tell us so much about the characteristics of the class, is it any wonder that teachers grow weary or despair at the complex children's needs that face them each day? If these traits were to be posted on the door of a classroom, who would dare to enter and assume the role of teacher?

Semiotic Affinity Or Lack of It Between the Teacher and Certain Children

The relationship between a teacher and each of the children in her classroom is a curious thing. It may be defined by many different signifiers: the child's attitude toward learning, his academic achievement or educational needs, his physical characteristics or personality, or by something entirely intangible. Some children remain in their teachers' memories long after their experience together. Similarly, some teachers remain in their students' memories forever. Now, some seventy-six years later, my father remembers his first teacher with gratitude and remarkable detail. He was a man who had insisted that my father be allowed to begin school rather than work in the wheat fields of the Ukraine as, near the turn of the century, so many children were required to do.

Some children and teachers simply fade from each other's memories. While their relationship during their time together may have been completely satisfactory, there was nothing between them that outlasts the passage of time. Other children and other teachers are remembered with less affection. Perhaps these are better forgotten, for to remember is to remember the stresses and strains of that relationship.

There are some children who develop a particularly satisfying relationship with their teacher. Implicitly if not explicitly, they become the "teacher's pet" or "favorite". To others, it may be obvious why the child attracts the teacher's approval. Politeness or compliance, cooperativeness and supportive behaviors toward the teacher, leadership qualities, or academic achievement, all play a significant role in establishing and maintaining such a relationship. In particular, when semiotics of attitude and behavior fall within a teacher's own semiotic criteria of what constitutes a good student, it is not unexpected that these meet with her approval.

But interestingly, the child does not necessarily have to be an outstanding student. There is a particular compatibility between the child's personality and the teacher's that appears to be more relevant that academic ability alone. This affinity, one for the other, does not necessarily reveal itself as open favoritism or explicit verbal approval from the teacher but rather from the manner in which she relates to these children on an ongoing basis. As one observes this, it is tempting to say that teacher and children have developed their own and mutually exclusive semiotic bond--a "frequency-band" of understanding that is all their own.

Mrs. Wayne describes her feelings towards Bruce, a former student:

> I was talking to my husband lately, telling him how I've developed closeness with some of the kids. It really hit home a number of years ago when I had a grade five class. I had Bruce in my class. His brother is in my class now and reminds me a lot of him. They have the same facial features, but their behavior is quite different. Bruce was the nicest little boy. It was almost like... {laughs a little embarrassed}...I had developed a crush on him. It was really strange. But he was such a nice boy. He was a good student, not top but average.
>
> The next year, we were all involved with the grade six operetta and I was playing the piano for them. The main character was the sheriff and the boy we had chosen decided he didn't want to be bothered. Bruce took over and did a great job!
>
> The night of the performance, he was really jittery with nerves and his teacher put her arm around him and I looked and it was sort of like....He's my boy! But he's not any more. It was just this awful feeling to see him relating to her. Now he was her little Bruce, not mine any more. And I thought the teacher and I are really close, but right then... It was a strange feeling!

[What is it? I had heard many teachers say this. Even after thirty years, I still remember with affection certain kids I have taught. What is it that tunes a teacher and a kid in?]

> I don't know what it is. Maybe there is something in these good vibes and bad vibes too. There's almost a chemical bond...but it's something we don't understand. I meet somebody, or a child especially, and I like them right away. Or there is something about them that I really like. I don't necessarily even know what it is. Often I can't figure out what it is, because I've liked kids that are just little brats. Who don't get anything done or have some problems.

> So it is not necessarily just the good little student. It's the personality. Especially if they are not sneaky. I doubt very much that I could ever like a child who is sneaky and underhanded and mean to other kids and saying nasty things.

Children like Bruce are able to create (what becomes for them) a self-rewarding semiotic pattern with the teacher. They learn quickly that there is a special quality to their relationship and learn too that there are certain special privileges attendant to that relationship. Just as Mrs. Wayne does, the children sense that "something we don't understand" happens between them. There is "something about her I really like".

While for most teachers, the idea may be subconscious, there is a sense of belongingness implied in Mrs. Wayne's saying, "He was mine." Not mine as a son, but mine as someone who demonstrates or even exemplifies one of the codes she holds to be worthy of recognition. His behavior, his appearance, his attitude toward others, his thoughtfulness, his efforts on his own behalf (whatever) are attuned to something the teacher values. In Bruce's case, it is his personality. But it need not be so comprehensive a characteristic. At one point, Mrs. Wayne mentioned that children with innocent eyes win her over every time. Win her over to them. There is in them an honesty and trust that attracts her notice and her appreciation. I am particularly captivated with children with large dark eyes. Some for implicit reason, I place this characteristic high along an aesthetic scale. Consequently such children already have favour with me, long before any pedagogical exchange begins.

This affinity of one-for-the-other is often established rather early in the relationship and continues despite disapppointments. The strength of that relationship allows each to tolerate behaviors and actions that, if exhibited by other children or another teacher, would provoke disapproval and a cessation of loyalties. Don, a boy in Mrs. Wayne's present class, typifies this. Whereas Brian, the non-achieving child, is likely to be reprimanded the instant he "steps out of line" or is even suspected of doing so, similar behavior from Don is condoned or more likely not even noticed. When she speaks of it, Mrs. Wayne is aware of the additional degree of tolerance she allots to Don. But she apparently does not realize how frequently this preferential behavior is operative. Video scenes illustrate that Mrs. Wayne's voice softens when she must reprimand Don and that she gives him greater leeway in remedying his misbehavior and greater time in which to make amends.

During a discussion of the amount of freedom children have in the classroom, we began talking about Don:

> [How would you react if I said that Don is the boy with the most freedom in your classroom?]

> ...[debating with herself]...Most freedom?... I don't know...I have to think of how we are defining freedom. Certainly he doesn't hesitate to get out of his desk and ask for help. He feels free to get up and sharpen his pencil.

[Is he free to decide if and when he will work?]

> He doesn't do as much as he should do, that's for sure. If you remind him, most of the time he will do it. And yet he feels guilty about it. That's not the freedom end of it, but rather his morals. For example, when we are doing a test, when I say, "Stop." he puts his pencil down even if he has one more to do. Whereas others will rush it in. I've noticed that four or five times during the year, when he could have easily cheated, he won't. He's very strict with himself that way. And yet, he knows he should get his work done but doesn't necessarily make himself do his work. Although, he is the one who is staying after school until it is done.

[But he didn't stay today, and I don't think he did much work.]

> No, he didn't.

[In fact, I was interested in the byplay between Danny over there and Don here. There was very little work. And a lot of "staging" on Don's part. He was kneeling on his desk, pulling out one layer of books and papers after another. It is almost as if he was acting. Just filling in time.]

> Hmm.

[I see that as both freedom and ease. He is very comfortable. But I wonder too if he isn't controlling you?]

> Yeah, I suppose I should be on the watch more.

[I'm not sure that that's it either.]

> No. Don is the kind of kid that I should be there more often saying, "Do this." "Do that."

[But you said "Don" a lot of times today?]

Yes. Yes, I did.

It is apparent from Mrs. Wayne's reaction that she is uncomfortable with my pursuing what she perceives to be a censure of Don and of herself. The foundation of her perception of him is based on: "He's just such a neat kid! He's so good inside." No persuasion will disperse that.

A more poignant situation involving a teacher-child relationship was observed in a grade one classroom in the spring of 1983. While it is evident that there are extenuating reasons for the teacher's patience, her special relationships with the child take precedence. Miss Graham is giving instructions to the children on how they are to do a particular workbook page. Ronnie, a tow-haired boy in a brightly striped t-shirt and cords, slips out of his desk in the outside aisle and begins crawling along the back of the room. Miss Graham (continuing her comments) goes to him, takes his hand, and returns to the front of the room. Ronnie leans against her. She gives his shoulder an exact squeeze. She has said nothing directly to him nor does she break her instructions to the class. Then Ronnie ducks out from under her arm, drops to his knees, and crawls on all fours back to his desk. Still she says nothing to him. Moreover, the children virtually ignore his unusual behavior.

What are we to make of this? Disregard it as too unusual to consider? No. Subsequent discussion with Miss Graham about this particular scene on video tape reveals a multiple-layered complexity enveloping both her and the boy. A divorce is pending with neither parent wanting custody of the child. His bizarre behavior now and on other occasions is recent and intermittent. The other children appear to have an intuitive empathy and tolerance for Ronnie's behavior and for their teacher's allowing it. "All of that is true," and she gives a long sigh. "But it is really much simpler. I love him. I did from the moment I saw him. Long before all this... all these other things happened. That's why I don't reprimand him. I can't. I never could."

Although the situation is unusual, it does suggest that, in terms of a semiotic relationship between teacher and child, this teacher and this child have developed their own system of signs--their own coding and interpretative understandings. These are mutually practised and mutually accepted. The other children know and respect the privacy of that semiotic exchange. They recognize it as outside the realm of everyday classroom routine that involves them as a group. Until this relationship completes itself, no one interferes in any way. No child comments or behaves as if anything unusual is happening.

In this, they take their cues from the semiotic actions of the teacher. If she accepts, they accept. With good grace, they listen and watch during this interlude as she simultaneously instructs them and comforts Ronnie. However, when a nonconforming child functions exclusively within his own semiosis--within his own creation and interpretation of signs--the teacher may not always tolerate the consequences. Fortunately, Ronnie benefits from a special compatibility with Miss Graham and at a time when he most needs it.

This example also suggests that there may be a number of codes or patterns in Ronnie's life and behavior that call to her. It may be that the more characteristics a child has that appeal to a teacher, the greater the likelihood that a high degree of caring and relating will evolve between them. Or it may be that the sheer impact of a single quality tips the scales determinedly for or against the child. Earlier, Mrs. Wayne was emphatic about not being able to like children who are sneaky or mean. Despite all other positive qualities, this one would alienate her relationship with them. Ultimately, a mutually rich and rewarding relationship between teacher and child frequently appears to be predicated on a recognizable sign or series of signs that emanate from the child and which the teacher values above all others.

However, not all children create this kind of affinity with their teacher. Some children have reputations well-established as a part of their own and school folklore. This reputation may be confirmed when the child becomes part of the classroom, or interesting variations may occur in a teacher's expectations and her subsequent responses to the child. Mrs. Wayne tells of such a situation:

> One little girl last year...Theresa...I had made up my mind that I would not like her because she had been a problem in grade two and three. There were problems with her parents. Mother had taken to drink. Her teacher would tell me all about this. But she also said, "Theresa will get on your nerves but you can't help liking her. She's on me all the time. She gets out of her desk. She does all kinds of strange things. She's a brat. She's spoiled. She's emotionally upset. She has problems with this....All kinds of things.
>
> Nothing but problems. But you can't help but like the girl."
>
> So I came in and said, "I'm going to smarten up that kid. She is not going to yell at me!" The other teacher got yelled at for ruining her Father's Day present. She had had to help Theresa with it and it hadn't come out too well. Theresa had said, "It was your fault! You did it!"
>
> I decided even before Theresa arrived that I wouldn't cater to her. I wasn't going to let myself like her until she is the kind of person I would like to like. I was not going to let myself go until I had shaped her up. I was that determined.

[Now, those comments were trustworthy, but at that time you had not yet met Theresa?]

> No, but all I heard in the staffroom was, "Oh! She did this today!" or "She did that today!" "I'm glad she is not here today." That kind of thing. Two years of very negative things about Theresa. Other than the statement, "But you can't help but like her." So I thought: I am going to straighten her out. I am going to be tough! She is going to

> do what I say! But {laughs}...it didn't work out that way!
>
> She walked into the room. I got after her a couple of times. "Sit down, Theresa. Don't bother me." And things like that. Within a couple of days, she was such a sweetie, I could have taken her home! {laughs at herself}
>
> I felt like I wanted to do something for her. And within a couple of weeks, I loved that little kid! And she could get away with anything!

[What did Theresa do to change your mind so dramatically?]

> She was really thoughtful. She could be nasty and she could get up out of her desk and she could be a pest! She was a pest. She always wanted to do this or that. You would be talking and she would get up and get a book. Things like that. Little things.
>
> She was just a real nice little girl. She would come up and give me a hug. You could just tell that she needed... she needed something. You almost have to let yourself go and accept that. And you want to give it to her. You want to give her everything that you have.
>
> I felt, "She needs me." Maybe that's part of it too. When you find out that they need you as a person too, not just as a teacher. Maybe that is part of it.

Perhaps the affinity between child and teacher is something we can understand. It is, as Uexkull describes it between mother and infant (Baer: 1981), a successful symbiotic relationship based on a mutual understanding of signs given and received. The child, in an intricate mode of expressing it, needs the teacher. Both Ronnie and Theresa expressed this emotional need. It was a need that each teacher could meet. But as Mrs. Wayne indicates, teachers need to feel wanted too. In this way, a strong semiotic relationship is established, one that sustains itself by its mutual rewards. It is no wonder then that teachers develop a special and enduring relationship with such a child.

The corollary is revealing, especially when read in the context of symbiosis. There are children whose needs cannot be met by the teacher and whose their life-stories explain (in part) why teachers cannot relate to some children or why they feel great frustration in trying to do so.

Toward the end of March, Keith, a boy in Mrs. Wayne's grade four class, announced that he would be moving away. Keith had been in almost continuous "trouble" at school. I asked Mrs. Wayne if it made any difference in her relationship with Keith now that she knew he was moving:

> {Laughs} Keith! I go down to the staffroom and say, "Five more days!" {Laughs in relief and at herself doing that.} It did make a difference actually in that he still hasn't brought his school supplies. You know, the ones they're supposed to bring in the first week of September? Once I knew he was moving, I wasn't after him.
>
> He and Danny were fooling around and fighting the other day. It was tricky because Danny started calling him names and then Keith said, "I'm going to move away!" Danny said, "I can hardly wait until you're gone!" He was really candid. He told him exactly how he felt. That was kind of touchy, because I was thinking the whole time...I can hardly wait too.

> But I couldn't ever let that out. Never! And I have a guilty feeling about feeling that way. But I know it's there and it's a human feeling. Really, it's because he does cause problems in the classroom. He's always... Well, it's like you get tired.

It may have been a coincidental omission or it may have been a symbolic one, but a description of Kevin's last afternoon at the school (and the last day before Spring Break) ends with:

> Mrs. Wayne: {Handing out children's work that has been marked} Be sure to let your moms and dads see your work. Most of you did a very nice job of it....Okay, Kathy's row may go. Matthew's may go. Leave quietly please. {Waits for other rows to settle. Bell rings.} All right, Lisa's row. Cheryl's {Gives a scooping wave to the last row}. You may go!
>
> {Children hurry to the coatracks. General jumble of children, clothes and take-home-things.}
>
> Mrs. Wayne: {Straightens books and cards at the math table. Walks down the aisle slowly, surveying desks and the floor area around them. Gives a sigh and shrugs as if to say: I guess that's the best clean-up they can do. Comes to where the children are getting ready to leave. Watches. Brushes her hair off her forehead.}
>
> Keith: {coming up to her} Mrs. Wayne? I'll be at the office.
>
> Mrs. Wayne: Keith!...Oh! I forgot!...Don't go!...No, no, no!...Wait....Do you have everything? Don't forget your running-shoes. Please wait. I'll give you your report-card! {Hurries to her desk, looks for his report card amid the papers there, reads it over quickly, hands it to Keith.}
>
> I hope you will enjoy your new school, Keith. {Ruffles his hair} All the best!

> Keith: {Gives Mrs. Wayne a long look, doesn't say anything, and stuffs the report card into a plastic bag full of his belongings. Turns to leave.}
>
> Mrs. Wayne: {Touches his shoulder and watches him leave}
>
> Children still in the room: "Bye, Keith!" "...See you sometimes, eh?..." "Yeah, bye Keith."
>
> {As he leaves, they resume their conversations. No one goes with him.}

Mrs. Wayne felt very badly about not remembering that Keith was leaving that afternoon. "Oh! How could I do that?" As she has expressed earlier, she had no regrets that he was leaving because of the difficulties his presence created for her. But she did not intentionally deprive him of a more appropriate leave-taking. Beneath this, however, is the relief that the problems inherent in Keith's behavior will no longer be her responsibility.

> Like when I had Sammy that year, the little boy who was always in trouble with the police. He was just such a problem. He was here all year. He didn't miss a day! Then one day in June he was away and I thought, "What a good day!"
>
> I remember times before, coming in and thinking, "Wouldn't it be nice if Sammy was sick today?" {laughs embarrassed at herself} It's no use kidding yourself if you feel that way. He was always in trouble it seemed. Always hurting other kids at recess. Constantly. He was in trouble with stealing, with the police.
>
> His mother didn't know what to do with him. She'd had a babysitter in for one evening.

> Sammy got mad and broke a few light fixtures in the house. He went around and smashed up a few other things. That was really bad. Here in school he would throw things, not just little pieces of paper (that's bothersome, like when Danny and Keith started doing it), but no, he would throw a ruler or an eraser and hurt kids, really hurt kids.
>
> Or like the year on the playground, Clint twisted Kerri's arm behind her back until he broke it. She was screaming and he just kept twisting it. And then it broke. Then the next day, Colin pushed her down and dislocated the same arm. That was the same year I had Sammy. It was a bad year around here, I can tell you! There was just that batch of them. All the others were really nice kids. But as they went up the grades, everybody commented on that particular group. What a group they were!

In this description, we see clearly that there are boundaries that, if crossed, terminate the possibility of any positive relationship with a teacher. Certainly the severity of the actions described would affect most teachers in the same way. A personal as well as a social ethic has been breeched.

Given the accumulation of problems some children create for their teachers, for other children, and for themselves, it is not in the least surprising that teachers find it extremely difficult to relate to them in a positive manner. Even when these children do behave appropriate to the conventions of the classroom and the school, their past and recent transgressions cast a shadow on them. By the very persistence of their misdeeds, disruptive children draw the sign of that negative behavior closer and closer to themselves. Their teachers have ever-increasing difficulty in separating that "sign" from these children. The "good" in the child becomes too difficult to find amid all the trying behaviors. Eventually, no one even tries.

But the sign that becomes attached to the child soon becomes a sign that reflects back onto the teacher. It echoes with her failure to make a significant difference in the child's behavior. Despite all rationalizations, the child lives in the classroom as a failure in and of himself, and as the teacher's failure. He is a sign of a need that his teacher cannot meet. Daily, such a child is an aggravation for his behavior cannot be condoned. But in reprimanding, the teacher is only reminded that the dilemma is repeating itself like a single note persistently played on the crack between two piano keys. There is no harmony between them, only discord.

These failed relationships may be seen as a failure to establish symbiosis and are characterized more by antagonism, resentment, and resistance than by acceptance, cooperation, and recognition. They are semiotic failures because child and teacher have literally nothing more to say to one another. They have reached a stalemate. Unless some radical change is affected, it is likely to last the entire school term. The child who fails to link his need and the being he is with an empathic teacher at some point in his school career may continually be the one no teacher can tolerate...but must.

But the relationship between a teacher and a child can be damaged by much smaller transgressions of some valued code of behavior. Just as so small a feature as a spray of freckles across a child's nose may cast the child in a favorable light, minor habits can create a negative reaction from the teacher. As Mrs. Wayne explains:

> Well, Roxanne! She is always doing that kind of thing. She will sit there with her hand in the air over some little thing. You know what her problem was? She had done the first math question...she does this all the time...it drives you nuts! She had done this question over in the middle of her page, so she was sitting there the whole time wondering if she should put number two at the margin! {laughs but is not amused}
>
> And I knew it was going to be something like that. I was prepared for that when I went over. It is so typical. She just always, always has her hand up. She always wants... She can understand it. She knows what she is doing. But she feels that she needs a little bit of attention.

[I knew there was an explanation, but when I first heard you reply to her, it sounded a little brusque. You said, "Roxanne, are you just sitting there with your hand up or do you really need my help?"]

> Yes, that's what I said. That's right. And as soon as she has a problem, it's hand-up! That's why I said, "Did you try to figure it out first?...If you try yourself..." I had a feeling it was something like that and it didn't surprise me at all. I should have just said, (if I had had a couple of more seconds) "What do you think you should do?" and made

> her say, "I should put number two here." "Yes," I'd say. "Do that!"...But you know, it is such a...so little a thing.

[But you did say that she may do it for recognition. We are talking about skills but we are also talking about kids and their relationship with you.]

> I remember...I was in grade three. I was always the good little student and I never did anything wrong. So I never got any attention, but I loved to talk to my teacher! I lived for it. I remember we were doing a rhythm band piece. Of course, being very musical, I got the intricate sticks' part. I could do that with just no problem at all. She was helping everybody else, making their hands go. And I can remember, on purpose, doing it wrong. But she just put me on the triangle which went ding-ding...So help me! I was so frustrated with that. So that is why I tried to get her attention, even if it is a negative thing. That seems to be the only thing they do notice.
>
> But somebody like Roxanne just asks for it too often. I can understand that she wants and needs the attention, but it is just too much! If it had been Denise or Marnie or any other kid and I could see they were looking for attention, it would have been okay because it is just once in a while. With her, it's all the time... {very softly} It annoys me.

As empathic as Mrs. Wayne can be in her understanding of Roxanne's need (based on her own childhood experiences and her professional astuteness), the annoyance effect of Roxanne's persistent call on her is very evident. This one sign sets in motion a negative response in Mrs. Wayne. Paradoxically, this in turn may be a sign to Roxanne that she has fallen from grace. In her bid to reinstate herself, she raises her hand to reestablish a one-to-one relationship with Mrs. Wayne. But that only perpetuates the antagonism and both are caught in a cyclical downturn of relationships.

> I think...through the year...you get to know the kids really well. Jimmy, for example, wouldn't be asking for attention for the sake of attention. At least not very often...once in a while. He genuinely has problems.

Genuine problems will draw Mrs. Wayne's concern; trivial ones will not. Problems that can be solved in the school context are fair; complicated problems involving family stress or destructive behaviors are not. A successful semiotic relationship between teacher and child appears to be based on the certain physical or personality characteristics, and on the basic tenet that the child will try as hard as he can to succeed in school. As many teachers do, Mrs. Wayne feels very strongly that the child must take some responsibility in the pedagogical experience. Children who do not, create enormous chasms between themselves and their teacher.

There are of course many reasons why some children come to school happy with themselves and with others and, equally, many reasons why some do not. A few children will always claim preferential relationships with their teachers; others, only negative ones. The majority of children and teachers will maintain a neutral relationship. There is much we do not understand about the subtleties of a singular relationship, whether that be between parent and child, teacher and child, brother and sister, husband and wife, or friend and friend. The relationship of teacher and child is particularly critical in that it exists within, and is buffeted by, the continuous and multiple interactions created by all the children in their relationship to one another and with their teacher.

Whether the reasons for a teacher's preferential treatment of a child are evident or not, the child who benefits from it is more likely to have a happier school life that the child who through no fault of his own, or with justification, falls on the negative end of the spectrum of a teacher's notice. Where children consciously (or unconsciously) can establish or are given this self-rewarding semiotic pattern with their teacher, it is apparent that they live within a context of semiotic behavior that meets with the teacher's tolerance and approval--a behavior that carries privilege and prestige within the classroom.

Where children, through their attitudes and actions, alienate themselves from positive relationships with their teacher, one might speculate that they are children who march to a different drum on a complicated and uncertain pathway. If this is so, do these children do so because they relate to a different "score"--a different reading of the signs and symbols of the classroom? And of the world? Is there something within them that insists that they define themselves in their own terms rather than in those of others?

And at what point does the teacher say: "This relationship is not working. There is nothing I can do about it. It is too great a disturbance for everyone, for me, to tolerate it any longer."? What then is to become of the child? Are these children the ones who succeed in life (by whatever criteria such success is measured), or are they the ones who fail? Does it begin in the classroom? Does it matter whether or not a child is able to develop a warm semiotic relationship with a teacher? Does it matter if this occurs consistently, or intermittently? And finally, is this semiotic relationship something that can be. should be, fostered intentionally and, if so, how?

THE UNIVERSITY OF ALBERTA

A SEMIOTIC EXPLORATION OF CLASSROOM SEMIOTICS

by

Florence Irene Danyluk McKie

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF ELEMENTARY EDUCATION

EDMONTON, ALBERTA

FALL 1985

Table of Contents

Volume II

The Semiotics of A Teacher's Interpretation of Children in Her Classroom (continued)

Cameos of Individual Children as Semiotic Types 407

Brian: The Child Who is Not Achieving . . 411

Marnie: The Exemplary Being in the Classroom. 422

Rob: The Enigma of the Quiet Child . . . 425

Danny: The Unrecognized Gifted Child? . . 432

Nancy: A Change in Self-Image as Semiotic Trauma 439

The Class as a Semiotic Whole 447

The Significance of the Semiotics of Interpersonal Relationships in Pedagogical Settings. 465

The Semiotics of Specific Pedagogy 479

The Comma Lesson: Basic Skill Development . . 487

Haiku Writing: A Semiotics of Difference. . . 499

Media in the Elementary Classroom: Extended Semiotic Horizons 506

The Science Lesson: The Semiotics of Delay . . 520

The Socio-Semiotics of Social Studies. . . . 539

Reading As a Shared Semiotic Experience . . . 573

The Significance of the Semiotics of Pedagogy . . 609

Pelc's Semiotic Quadrangle as a Guide for Interpreting Pedagogy 611

The Semiotics of the Pedogogical Process. . . 617

Pedagogy Interpreted by Peirce's Functions of Sign. 621

The Interlinking Semiotics of Pedagogical Meaning. 628

The Critical Significance of the Semiotics of the Teacher 632

The Power of Icon, Index and Symbol in Pedagogy 633

The General Semiotics of Pedagogy 638

The Semiotics of Delay Defeating Pedagogy . . 641

The Power of the Semiotics of Communitas in Pedagogy 643

III. THE INTERPRETANT: THE SEMIOTICS OF THE RESEARCH PROCESS 647

Human Experience as Text: An Interpretive Mode . . 649

Experience as the Genesis of Text 655

From Experience to Text 656

Experiential Texts 663

Embedded Text 664

Actuality Text 665

Commentary Text. 668

Reflexive Text 670

Documentary Text 671

A Sample Sequence of Working With Experiential Texts 672

The Value of Experiential Text Differentiation 676

Video as a Semiotic Experience-Maker 690
  The Semiotics of Film. 692
  The Video Camera as Participant-Observer . . 694
  Children's Curiosity About Video Technology . 698
  Children's Awareness of Camera and Self. . . 705
  The Forgotten Rights of Children as Video Subjects 720
  Video Taping Children Acting as "Teachers". . 722
  Teachers "On Camera" 725
  Challenges During Video Taping. 729
    Researcher as Cameraman. 730
      Filming and the Selection of Shots. . 731
      Ethical Consideration During Filming . 736
      The Technicality of Time and Place. . 739
  The Challenge of Video Analysis 742
Semiotic Significance of This Study as a Dialectic of Pedagogical Content and Research Design . . . 751

BIBLIOGRAPHY 767

APPENDICES. 786

ILLUSTRATORS

Tables

6. Research as a Semiotic Process: Experience and Text. 757

Figures

8. Semiotic Traces of Dialogue and Experience As Potential Texts. 653

9. Texts Evolving from Human Experience (From the Perspective of the Researcher) . . 684

10. The Semiotic Compatibility of Research and Pedagogy as Semiotic Processes. 754

Appendices

1. Information Letter to Parents 787

2. Permission For Pupils' Participation. . . . 789

3. Teachers' Confirmation for Research Schedule . 790

4. Kindergarten Observation and Video-Tape Analysis (Children in Free-Play) . 791

5. Transcript: Video-taping of Kindergarten Girl Acting as Teacher (Miming Own Teacher) . . . 795

6. Transcript: Video-taping of Grade Three Girl Acting as Teacher (Reprimanding a Boy) . . . 797

7. Transcript: Video-taping of Grade Six Girl Acting as Teacher (Assisting a Pupil, and Assigning and Directing Groups) 800

8. Transcript: Video-taping of Grade Six Boy Acting as Teacher (Concept Teaching). . . . 802

9. Transcript: Video-taping of Grade Six Boy Acting as Teacher (Nonverbal Semiotics of Praise and Disapproval) 806

10. Transcript: Conversation with Grade Four Girl (Her Reaction to Acting on Video as Teacher) . 808

SEMIOTIC CODES

There are many excerpts from audio and video transcripts used in this dissertation. These are fundamental to the interpretation of the semiotics of an elementary classroom. It is important, however, that the source of these excerpts be designated because my interpretations stem directly from what the teacher and the children said or did during their classroom activities or in conversations with me. In order to differentiate their voices from my own, a semiotic code has been designed:

[......]	Indicates my voice as researcher, frequently in the form of questions or comments related to what others say. Also used, embedded in others' dialogue, when the impression I accredit to the matter might not necessarily be confirmed by other observers, i.e. a subjective interpretation.
(......)	Indicates parenthetical comments made by the person speaking, and occurring during dialogue.
{......}	Indicates accompanying physical action, gesture, or facial expression. May be non-verbal and self-referential, or directed to others.
***	Indicates, in a sequence of uninterrupted transcripts, that the speaker has changed. Because the majority of

conversations and interviews
were with individuals, a
different time and place is
implicit in the different
quotations given unless
otherwise explained.

Following the ethics of confidentiality, all children and teachers referred to in this study are represented by randomly chosen pseudonyms. The pseudonym of each person whose conversation is quoted has been inserted at the beginning of the statements. When no new name is given, the implication is that the same person continues to speak, or that the conversation occurs turn-after-turn between the two persons initially named.

Further, it will be noted that there is considerable stylistic variation in the presentation of lessons in "The Semiotics of Specific Pedagogy" (infra.:480). In each case, the format is intended to be in semiotic harmony with the content under discussion.

Finally, the dissertation is written in a personal style rather than in a formal, objective one. This is a reflection of my preference, and a semiotic reminder that the interpretations and analysis are never far from my perceptions nor from those of the teachers and children involved.

Our conversations were between people, and not specifically for this dissertation. The personal pronoun, whether used by me or by persons sharing their thoughts with me, is intended to keep the reader in their context as much as possible. Similarly, most of the references to the children and teachers are identified by their pseudonyms. Where broader generalizations are discussed, these names are put aside and the truly amorphous "they" take centre stage. But for every "they", there is a lively group of chattering children and reflective teachers who brought the essence of that generalized meaning forward for our consideration.

Finally, each child and each teacher retains his or her sexual designation--the "sign" under which they live in the classroom. They are as they are, with dignity and self-identity.

Cameos of Individual Children as Semiotic Types

Each child in the classroom is unique, yet each falls into a profile that is recognizable as a certain archetype. It makes little difference whether you are looking at the most recent formal portrait of a class or the earliest rotogravure. Somewhere in the rows of faces, you will find a facsimilie of yourself, your best friend, the classroom clown, the bookworm, the trouble-maker, the slow one, the brilliant one, the shy one, and the girl or boy you had always wanted to know better. Because we are human, we will find these likenesses captured there.

Within the context of this dissertation, it is not possible to deal comprehensively with the various types of child. Instead, cameos of various children in an elementary classroom are presented as illustrations of how, using a semiotic perspective, it is possible to gain valuable insights into the relationships between the teacher and the children and how these affect the pedagogical progress of the child. The commentaries are given by their teacher, Mrs. Wayne, and were obtained during interviews from September, 1983 to May, 1984. The companion-piece is "Children's Semiotic Understanding of Other Children", in the section on Semiotics of Interpersonal Relationships.

There are many children about whom teachers expresses concern: the non-achieving child, the exceptionally quiet child, the distracted and disrupting child, or the child who performs significantly above the level of achievement of the class. Descriptions of these children demonstrate a number of things. First, teachers do perceive very subtle nuances within a child's behavior that function as signs to the problems or challenges the child is facing. In such cases, these signs are indices pointing to the child's dilemma, for rarely does a child articulate his particular needs to the teacher. A child does not say, precisely at a point of confusion, "I need your help in understanding this." A child does not say, "Yes, you have given me extra work but I don't want more of the same kind of exercise. I want something more interesting, more challenging." In the midst of a lesson, no child will say to the teacher, "This is excruciatingly boring!"

The second feature that the descriptions below illustrate is that teachers do try to provide as much as possible for a child's specific needs. Not only are they acutely aware of the issues involved but they bring sensitivity, empathy, and a kindly discipline to helping the child. In some cases, there is also a note of despair about accommodating the multi-faceted needs of each child within the limitations on what is possible. How a teacher begins to understand each child is illustrated in many of the comments made by Mrs.

Wayne and others. That semiotics play a significant part of that understanding is also apparent.

In the following section, the non-achieving child is described both as an archetype and as a child with very particular needs. By inference, that portrait tells a great deal about the achieving child.

Included in the cameos of individual children as semiotic types, is Marnie's story. Her story is remarkably short. She is the exemplary student in any classroom, the antithesis of Brian. She does everything right and this makes for rather obvious insights. Nonetheless or because of it, she is a treasure appreciated by every teacher and the reason why many teachers continue to teach. Rob, the boy sitting at the back of the room, is the quiet child. As much as we can speculate, we can never know a great deal about him. But Rob may be as accurate a measure of a teacher's success as any other. Danny is described as a unrecognized gifted child. His behavior in the classroom is generally seen by Mrs. Wayne as a disruptive force. The final description is of Nancy, a girl who has been an outstanding student. As her level of academic performance changes, there are tremendous implications for Nancy, her parents, and her teachers.

The designation given to each child is based on observations of the child during classroom activities and on repeated viewing of video scenes in which these children appear. In some cases, as with Marnie and Rob, this designation coincides with Mrs. Wayne's. In Danny's case, however, the sign of an "unrecognized gifted child" was given during analysis and not discussed with Mrs. Wayne. Nor were the full implications of Nancy's semiotic trauma discussed with Mrs. Wayne. These are extrapolations drawn from my reflection over time.

***

Brian: The Child Who is Not Achieving

Near the end of the first term of school (December), Mrs. Wayne describes Brian as a boy who is having a great deal of difficulty coping with the requirements of the grade four curriculum. We are having lunch together and discussing her annoyance with Brian's continual disruptions during that morning. It is a candid conversation, reflecting her compassion as much as her frustration.

> Mrs. Wayne: Brian hadn't done a thing! What got me was that I had gone over his work, showed him what the problem was, showed him what he was doing wrong and what he was supposed to be doing. He doesn't know his times-tables at all. There it is again. What can I do? I told him that.
>
> I got a note from his Mom that they are having family problems: "...so please be a little easier on Brian." That is a real excuse there. I can understand that. If you have emotional problems, I have to take that into account, but still....
>
> The thing that got me was that I was busy at the back and I was getting hassled there. After the announcement about the puppet troupe coming this afternoon, the kids were starting to mill around and were not getting their work done. I was trying to help a few people at the back, going over a few things. Somebody came up and her work was all wrong. I had to figure out what was wrong, where she was going wrong.
>
> I looked up and Brian was still not doing anything. He was laughing around with Jimmy and Danny. I went up and since I had checked his work before, he hadn't done one thing! Not one...not one number. He didn't even put

down the number of the question! I saw my red mark that I had made on his work last and I knew how long it had been. It makes me so mad that he thinks I should stand beside him all the time or hold his hand.

We had had a run-in yesterday, he and Jimmy and I. They had been told--warned--that they had to go down to the resource room quietly. They had run down before, just galloping through the hallways, screaming and being generally....bad. I had warned them before: "Go really quietly. Don't disturb the other classes when you go by." No. They came back with the principal about ten minutes later.

They had been running around the hallway, the whole hall, in circles around the central core. He had seen them and was very annoyed, had talked to them in the office and then brought them back to me. There were two parents standing in the hall too who saw this. The kids tried to say they hadn't been running around, but the parents there said, "Yes, they had." So, they couldn't get out of that.

So I had had that run-in with them. That's their attitude all the time. It keeps showing through. Jimmy has that problem too but he is not as bright. He doesn't do his work and he had his problems and everything else, but he doesn't....well, he talks out too and he fools around too...he is no angel! But he doesn't get that look on his face...snarky, and go stomping. You saw how Brian just stomped out!

Jimmy won't stomp out so...of course you tend to be a little easier on that kind of child, even if the actual deviation is the same. If they had done exactly the same thing, I would probably be harder on Brian because of the "faces" and the stomping and the throwing things. Like he would get mad and throw his book down. Because of that, I would probably be harder on him. It triggers something in me.

From Mrs. Wayne's point of view, Brian blatantly and deliberately flouted all that she values:

- the code of appropriate classroom behavior,
- respect for her authority to make decisions on his and the class's behalf,
- good work habits related to assigned tasks,
- appreciation of individualized assistance
- the suppression of overt critical comments, gestures, and facial expressions, and
- truthfulness, even to admitting fault.

The transgression of these explicit and implicit rules "triggers something" in Mrs. Wayne. Brian stands before her in open and resentful defiance. In his anger, he makes "faces" at her or, if not specifically at her, at the situation in which he finds himself. He stomps an open semiotic message to everyone around him, but particularly to Mrs. Wayne. He does not say, "I am angry!" He doesn't need to. He does not say, "I hate you." He cannot. All his values hold him back from that edge. What his mouth cannot say, his body does. And it speaks eloquently.

Then...Brian throws down his book. But this is the very symbol that Mrs. Wayne honours above all other things in the classroom. For him, it means he will have no more to do with it. For her, it is a gauntlet. He challenges her and the challenge is not forgotten nor forgiven. Nor can it be ignored. Brian's open semiotics of rebellion, frustration, and despair are not to be tolerated. The classroom cannot function on this level of emotional display. There are other children to consider. If one child is permitted this measure of disturbance or license, would not another child lay claim to it too? In an instant, his anger becomes her anger. His frustration, hers. Yet she knows he is a child, only a child, and a child in difficulty.

Still, she uses another criteria to measure out the degree of her tolerance. Brian is more capable than Jimmy who she forgives even though "he's no angel"...whom she can forgive. Is it because Jimmy, less able, calls to her empathy? Or is it broader still: that the challenge of working with less capable children is understood as a professional challenge and draws its own empathy onto the teachers who teach them? Does she forgive Jimmy because he must forgive her for being unable to change his life, to make learning easier for him, to make him "able"? Does her anger against Brian not increase just because of this contrast? Brian is able. Consequently, as a teacher she should be able to guide him to meet higher expectations. At this moment, his defiance is a dramatic symbol that she has failed. His lack of control is emblematic of her pedagogical failure. Is she not as angry with herself as she is with Brian? Angry with Brian. Are they not both caught? Her anger is so wrapped in

Brian's that those who look on quietly step aside and take up their own work with renewed and conspicuous diligence.

But if this is a discernible moment of the kind of pressures that befall both child and teacher, then we must return to the beginning of the teacher's explanation of the morning's problems and later go on to its end. There is so much in Mrs. Wayne's words that leads us to a deeper understanding of how the child who is not achieving (yet is judged to be capable of doing so) disturbs the teacher's equilibrium as a teacher and as a person.

This story had a simple beginning. I had remarked to Mrs. Wayne, "I missed what happened with Brian this morning." I was referring to a commotion that had centred about him. I had not seen its beginning. Her immediate response was: "Brian hadn't done a thing!" Brian had not even put down the number of the next math question. In all the time since she left him to help others, he had not put pencil to paper. The semiotic sequence had been: help needed, help given, help totally ignored. From Mrs. Wayne's point of view, the sign of his irresponsibility is intolerable; her resentment completely understandable. Despite--in spite of--her efforts to give him individual assistance, Brian had done nothing. That he laughed and enjoyed being with his friends was the ultimate breech. How is Mrs. Wayne to "read" this, except that school work holds no importance for him? What teacher can readily accept this?

However, if we look at the situation from Brian's point of view, his reaction is less surprising. Mrs. Wayne tells us that Brian does not know his times-tables. These are a semiotic maze that confuse many children. But four months into grade four, he is expected to know them. He does not. "There it is again. What can I do? I told him that." At this point, Brian gets a message. A strong one. He does not know his times-tables, but he already knew that. It is the next comment from Mrs. Wayne that matters. "What can I do?" If she is giving up, what can he do? He cannot immediately master the times-tables. So Brain gives up--to the point of never returning to that page of math. He is at an impasse. Mrs. Wayne has said she can do no more. Where is his help to come from, if not from her? If he returns to his questions, there will be no help available. He knows he will need help. So why bother? He turns to talk with his friends. It is easier. To do otherwise would mean facing himself as a failure again. He has already done that more than once this morning. That is enough.

Unfortunately for Brian, he is one among many who are also in need of Mrs. Wayne's help. She is being "hassled" at the back of the room. Too many children do not understand. Is this not a reflection of her failure to clarify the particular concept that is presenting so much difficulty? It is a sign of her own inadequacy that frustrates and alarms her. She has built her lesson on sand and the castles are collapsing. What was taught must now be retaught. Brian is simply the final thrust against her professonal competence. Her anger at Brian is a multiple anger: at herself, at him, at the other children, at the difficulty of teaching (of reaching) twenty-seven children, at the endless demands on her being, and at being a teacher when teaching never was, and never will be, an easy task. This particular morning is a semiotic synthesis of why teaching can be very difficult indeed.

Try as she might, Mrs. Wayne cannot alone resolve Brian's difficulties in his academic studies. She calls on the help and support of the resource room teacher. But Brian and Jimmy's journey (from the regular classroom to the resource room and back) becomes a brief respite of freedom from Mrs. Wayne's insistence and disappointment. They "gallop" in the hallways and run in circles around the central core of the school, the library. At the risk of one more symbolic foray into this example, it would seem that Brian and Jimmy, by _not_ being able to enter into the ongoing mainstream of the grade four curricula, run aimless circles around it. And who is to say that in this they are wrong? Where _is_ their joy in learning to come from? If they cannot find pleasure and success in their school work, they search for it in play. That they knowingly do this, at the risk of censure and punishment, is a dramatic gesture--one that is not without serious implications for our priorities in education.

When Mrs. Wayne describes her confrontation with Brian and Jimmy as a "run-in", it does carry the connotation of a collision of persons heading in opposite directions. She, in her anxiety that the boys overcome their learning difficulties; they, that they avoid them entirely. She, in offering assistance and assuming that they will take up some responsibility in mastering basic skills (the lack of which will continue to interfere with any subsequent learning); they, in their reluctance or inability to take charge of their own learning. The "run-in" is symptomatic of differing expectations which, unless resolved, can only lead to further difficulties for the boys and for Mrs. Wayne. She sees no gesture coming from them that indicates they bring any effort toward such a resolution.

One of the attendant problems is Brian's interfering with other children as they work. In particular, his difficulties cast ripples among the children who sit nearby. Mrs. Wayne has attempted to relocate Brian in the classroom so that his erratic behavior has less effect on them.

Originally I put Brian in that front corner desk to separate him from the others. I just don't know where I can put him. I am forever looking...I mean, Danny's place has been changed and that has really helped. I keep looking at other people where I could make a change and I just can't put him anywhere. He had been originally at the back, about where Danny was sitting. I'd just move them all the time! At least when he is at the front, I can walk over once in a while when I am teaching,

but....Then too, there are only so many people that can be behind him. I don't know....

Brian is slow. Not necessarily a slow learner, but he is not finding school easy, so he gets frustrated. There are a lot of family problems right now. I don't know how much that influences him. But he was away for a week and a half because his Mom just took the kids and left. So there is that. I'm sure it cannot be very happy at home if that is going on. Especially if it had gotten to the point where the mother had to leave. But still...I just don't know...I don't know what his problem is.

Once in a while, he will really put forth and you feel that you really like the kid. Yesterday when we were ready to go out and he was still involved inside with his work, I liked him and I put my arm around him.

When he fell...he fell actually because I think Matthew did push him....I was watching....it looked like Matthew was running too close and stumbled, but I have a feeling it was a push. But I didn't want to even suggest that to Brian because then he would have been fighting with Matthew. So I got him up and wiped off his face and he was very happy and comfortable.

But I can only do that...I have to be sincere. If I don't really feel it, I just can't sort of, "Oh, Brian, you're really a good student..." not if I don't really feel it.

> It makes it hard. And they *know*. He is happy with himself when he does get some praise, so we both benefit. He should be able to build on that...but he is not doing that.

Finally, it is important to know the ending of the original episode when Brian and Jimmy came back from the principal's office after their romp through the halls and after they had missed their resource room time. Mrs. Wayne concludes her explanation:

> I made them sit and put their heads down for a time. Brian came back quite chastened. He was close to tears. But...I just felt...I was *really* angry.

The boys' heads are down: in defeat, shame, exhaustion, despair, or relief? Symbolically, they are subdued. Their "galloping" is stilled. They are in their desks, captive and controlled. But even tears will not help the teacher nor the boys. The problems remain unsolved as anger, hurt, and frustration swirl about them all.

I had been witness to all but the beginning of the scene. Now I sat to the side at the front of the room, writing notes. Mrs. Wayne soon left for the staff meeting. All but two of the children had gone. Brian still sat in his desk with his head cradled in his arms. Tony, his neighborhood friend, was there too for a long time, just reading. Then he left. I waited a long time. Then I said to Brian, "How are you feeling?" He raised his face and wiped the beads of moisture that had gathered on his forehead. "Do you want to talk about it?" He shook his head emphatically, "Ngnnn!" He got up very slowly and very slowly left.

Perhaps the only good that comes from describing this situation comes from our thinking about the conditions that provoke such responses from teachers and children alike and from searching for some understanding that will circumvent the culs-de-sac. In candidly sharing the context of the episode, Mrs. Wayne helps us take the first step.

The dilemma for the non-achieving child and the teacher is complex. But where children's behavior, particularly what is perceived as their "negative" behavior, is considered as a sign, a symptom of a deeper malaise, there is greater hope than before. This sign can direct our efforts more constructively toward helping the child resolve the distance which increases with each year of his non-performance between what he is capable of and what the grade requirements are imposed on him. As more and more children continue in the regular program and as more and more children with various handicaps come into the school for the first time, a commitment to pedagogical astuteness is imperative. Complacency in pedagogy is an anachronism as never before. While semiotic sensitivity will not eliminate all the problems, it may be too powerful an insight to dismiss.

Marnie: The Exemplary Being in the Classroom

When having children like Brian in the classroom is inevitable, teachers are eternally grateful for those children who take school work seriously, have developed good work habits despite their young years, are attuned to their teacher's instructions, and respond readily and with good humour. Teachers are even more grateful for children who, in addition to conscientiously completing the assigned work, find, from the variety of resources and teacher suggestions, ample alterative activities to enhance their own educational growth. These are children no teacher ever forgets. Tall for her age, Marnie with her bobbed black hair and her quiet elegance is just such a child. She sat in the front desk in the middle road. It was inevitable that, at some point, I would want to discuss Marnie.

> [One of the reasons that I haven't noticed Marnie as much as some of the others is that she doesn't seem to chatter as much. She always seems to be to working. Once she peeked over and I noticed it because it was so unusual. It was just for a second. She peeked back and went right back to her work.]

>> Mrs. Wayne: Marnie's just so keen on all her schoolwork. I've never had a student so keen before. I had to mark five math pages for her today. Then she did some more. I had to say, "Put it on my desk and I'll try to have it marked for you for tomorrow." She doesn't hand it in long enough for me to mark. If I happen to do it right after school, fine. There's not a chance to get even two questions marked during day because she's always working on it every second she has! Which is every second I have! {Laughs}

Marnie is the epitome of the academically-oriented child. Her standards of performance and decorum are in semiotic harmony with those of her teacher. They share a common understanding of and many informal conversations about what school is all about. Marnie derives her satisfaction from a task well-done and quietly thrills in keeping Mrs. Wayne continually providing new material for her and marking it.

> Mrs. Wayne: Marnie has done so many of those Blast-Off Math cards! Not because she gets balloons for finishing each level, although that is important. But I'm sure it's more than that.
>
> [And is it more than just "for you", the teacher?]
>
> Oh yes! Although I had to chuckle the other day. She'd given me a whole bunch of cards of mark and I said, "Oh, Marnie! You're going to give me a nervous breakdown with so much to mark!" And she laughed! "Do you know what you are doing to me!?" I said.
>
> [That's praise for her, of course.]
>
> Oh yes!

Should Marnie break an implicit code of behavior, she is readily forgiven for it would be but a minor variation in an otherwise exemplary grade four performance.

> Marnie's not a goodie-goodie. She's got character and even a little rebellion. But if she's doing something she's not supposed to, I don't get after her nearly as much as I do with kids who are always in trouble. I know she'll settle down again even if I don't tell her. Besides, she works so hard most of the time that when she takes time-out once in a while, she's earned it.

Because of or in spite of her success, Marnie never questions Mrs. Wayne's word but accepts each situation and circumstance as it is given. As Mrs. Wayne looks around her class, made up of so many diverse personalities and behaviors, Marnie is a zone of certainty. She is obedient, predictable, pleasant, helpful, caring, and diligent--all the characteristics and semiotic signs that endear her to Mrs. Wayne. Of all the children, Marnie makes Mrs. Wayne's job easier. In expectation and effort, she parallels Mrs. Wayne's intentions for the whole class. For Mrs. Wayne, Marnie is the personification of the ideal student. As such, she is valued and thrives in that recognition. Having absorbed all the values and behaviors of a learner, Marnie is the child who will do well in whatever she choses to do, providing it is in an area where conformity is expected and tangible performance is taken as the criterion of excellence.

Rob: The Enigma of the Quiet Child

In contrast to Marnie's easy interaction with Mrs. Wayne, Rob, the quiet child, is an enigma. Who is he? Mrs. Wayne says, "I don't really know him. We just don't seem to communicate very much." While many children are eager to relate to their teacher, some shy away as a foal might in a confusion of choices or in a hestitancy to trust. Quiet children often appear very self-contained. In turn, teachers are reluctant to intrude into that privacy. But it does concern them. Pedagogical interaction is dependent on the child's responsiveness to the teacher. Where this is withheld or tentatively measured out, the teacher faces a web of complications which she does not easily understand.

Every class has a quiet child. Mrs. Wayne has Rob. We have met Rob before. He is the tall, thin boy who sits at the back of the room.

> Mrs. Wayne: Oh yes, Rob is very quiet. His dad has said that he had a bit of a speech problem, although I haven't seen much of it. Appparently for a couple of years, he would never speak up. His older sister is another sweetheart but also very quiet. There's apparently some family problems right now, although they didn't elaborate on it and that could have an effect. I don't know. It might have some bearing on his behavior, his shyness.

> I really like him. I think he is such a sweetie. Very quick in math, really likes math! But he does have problems with his reading. Which could be why he doesn't speak very much either. Dad says this happens in cubs or anything else too. No, he's not a talker at all. He's just very low-key in everything.
>
> He doesn't get a thrill out of being a board-person or messenger. In fact the week he was messenger, I thought I saw a hesitancy in him, not wanting to go down to the office with the attendance. Then he said, "Can you send somebody else with that?" I don't think it's because he doesn't like to talk to people. Actually, taking down the forms isn't a big deal. They leave it on the secretary's table. There's not much communication necessary. For most of the kids here, it's a bit of a thrill to be messenger.
>
> In fact, he didn't wash the boards once the whole week. I asked him to take the brushes down, which he did. He remembered. But I felt even as I was asking him, I was almost imposing. I think he doesn't think it's a neat thing to do, whereas others see it as a real status thing, even washing the blackboard. Rob probably sees it as work.

Rob is an important child to consider. There is no single reason for his quietness, although a number have been proposed. Why Rob is shy may be an interesting investigation, but it is likely that his teacher has very little to do with it nor can she change what is obviously a long-standing disposition. This does not imply in any way that it should be changed. However, his quietness does create an intriguing dichotomy in his relationship with Mrs. Wayne. Rob creates no difficulties within the classroom, rarely talks to others, concentrates on his own work, and is invariably polite. He is a handsome young boy. He is considerate in his manner with Mrs. Wayne and with the other children. She has no reason to complain about his behavior. In fact, she is very fond of him. "He's a real sweetie." In many ways, Rob too is the epitome of a good student.

On the other hand, Rob may see these monitor tasks as menial work and not to be valued as they are by others. Tactfully, he defines the territory in which his cooperation can be solicited. He never openly refuses. He merely diplomatically suggests alternatives. Along with all his many positive characteristics, Rob makes his own decisions, takes a diplomatically firm stand, and is able to acquiesce in spite of Mrs. Wayne's expectations. Is this not a sign of maturity?

Rob seems perfectly content to be a spectator in the affairs of the classroom. His self-containment, low-key and brief comments, and his controlled movements set him apart from the boisterous and uninhibited behavior of the majority of the boys. His friendships too are low-key: a quiet conversation over a Star Wars comic book or a reflective exchange with Shawn who sits in front of him. Their work finished, Shawn and Rob (leaning on their elbows across their desks) talk and laugh quietly. An oasis. Then Shawn gets up to join a cluster of boys at the round table. His voice raises to theirs and any one who cares to can hear them. Rob stays in his desk, pulls out a book, and slides down in his desk and reads. When Mrs. Wayne calls the class to attention, Rob is the first to respond. When others are slow in taking their places, he returns to his book but remains watchful for the moment when Mrs. Wayne is ready to continue.

But Mrs. Wayne remains puzzled by his very passivity. Rob does not show signs of enthusiasm, responsiveness, or interest. In his neutrality is an impenetrable mystery. Because the relationship is neutral--neutralized--Mrs. Wayne is hard pressed to find an entry point. Conversations fall aside after polite but non-committal phrases from him. There is no behavior worthy of praise nor inappropriate enough to scold. His school work is done well but rarely exceptionally. Semiotically, the quiet child sits equidistant from the sign and its interpretation. Rob exemplifies the statistical mean: the "average" child. There is one in every class and each one is an enigma.

Sometimes the quiet child is thought to be an unhappy child. While this may be true for some, Mrs. Wayne points out that there are semiotic clues that suggest otherwise.

> I find that the quiet kid is often a very bright child. To me, the quiet kid (not always but quite often) is a child who can sit there, have his work finished and not be fooling around. He is able to amuse himself. I can imagine what is going on around in their heads. They are probably inventing all kinds of things. They are out in some imaginary land somewhere. No, not necessarily

> unhappy. Quite satisfied, quite often.

[And you would not necessarily "bring them back" to the real life in the classroom?]

> It depends. If we are in the middle of a discussion, I might remind them that they should be paying attention. But you can see the difference. If they don't feel like participating, you can still tell they are listening. You can usually tell by their eyes. They glance at you every once in a while. Someone watching can see that. They may not be completely listening, but they usually know what we are doing.
>
> There is another look though: the daydreamer-look. You can tell. They are off in another world. The true daydreamer is just in a daze. His head is here and but his eyes are focused out there. They are frozen. And who knows where his mind is?

Mrs. Wayne has given a lead to defining quiet children in different ways. In discussing Paul (another boy) earlier, she indicates that she knows he is troubled by family problems and that periodically he finds little relevance in the semiotics of the classroom. His priority seems to be in reliving the context of his whole life, of which his school-life is but a small portion. The daydreamer, on the other hand, while sharing some of the outward signs of mentally being elsewhere, is preoccupied. He is... (Where?)...somewhere more attracting than the classroom. Mrs. Wayne understands both symptoms very well. Many teachers do.

What she cannot understand quite as readily is the quiet child who is simply quiet by preference. Interestingly, she finds it easier to understand a girl who is quiet than a boy.

> Mrs. Wayne: I like boys. And I like boys who are mischievous too. I like boys who have character. In fact, I am more apt to like a girl who will sit quietly, being a model little student, than a boy. When a boy sits quietly being a model student, I wonder what's wrong with him.

Semiotically, quiet children like Rob are able to simultaneously give the impression of deference and resistance, of cooperation and withdrawal, of participation and isolation. It is as if they must allow the teacher total reign. They are watchers in the human drama of the classroom. They become involved only on invitation and only on their own terms.

One interpretation stems from Mrs. Wayne's statement that quiet children are often very bright. Taking this as a semiotic lead, it may be that these children find that time in the classroom is too fragmented, too brief, too teacher-dominated, too child-catering for them to participate in the way in which they would like. That, in essence, time is too slow. They can and seemingly must fill it with their own thoughts, thoughts perhaps related to the subject but beyond the pace and content of the discussion of the class as a whole. For these quiet children, the classroom world is not enough. They must and apparently do create a synchronous world to which they journey and from which they return. The quiet children may be pedagogically crucial: are they silent indicators that lessons are not as rich, relevant, and rewarding as they might be? Should be?

Many of these children are also children who wait, wrapped in a decorum that does not allow them to interrupt or to spontaneously contribute their ideas at the moment in which they would be most relevant. Some of these children will be (or may now be) writers for whom the spoken language is too precipitous, too inexact, or too revealing of uncertainties. Part of the puzzlement about quiet children is their own reticence to participate in interviews or even in casual conversations. So it is that we are left only with speculations about their true nature. In the end, we come to where we began: the enigma of the quiet child.

As with the foal who does not move toward you until he knows exactly who you are and if you can be trusted --entrusted--with his being, the quiet child in the classroom must be allowed to make his own decision and take his own time in the coming. But this is not to say that the teacher cannot give a gentle welcoming smile and hold a lump of sugar in her hand.

Danny: The Unrecognized Gifted Child?

[Danny intrigues me.]

> Mrs. Wayne: Danny. Yes... {sighs}.

[Why that sigh?]

> {bigger sigh} Because Danny... Oh, he... Oh, I don't know. I always liked Danny before I ever had him and I'd been warned that he drives you nuts. In fact, some of the teachers and I were talking about him on our camping trip, after the kids had gone to bed.
>
> What gets to me about Danny is that he knows better. I think a lot of it is that he just hasn't learned social skills. {speaking emphatically and quickly} He knows he is talking out. He is not a hyperactive child that just can't control himself.
>
> You know, there's a boy like Danny in Mrs. Dresden's room. When you get after him, he looks at you like he's desperately sorry. He didn't realize he was doing that and he's sorry. Danny doesn't show that remorse, or at least if he does, it's gone so fast!
>
> Yesterday, I felt bad because I had him almost in tears. Well...I just said, "Danny! You just haven't done anything today. And there is no excuses. You've got a good brain in your head and you'd better start using it. Because you are not proving to me that you know what you know." Which is true. He's smart. He could do it. He is just lazy. He just doesn't want to do it and he's not doing it! And there is no reason for it, not that I know of anyway. He can do it. He can write. There are no perceptual problems. There is no lack of intelligence. There is no excuse... other than he is just darn-well lazy. So I got after him.
>
> I could see the tears fringing here. And one of the kids, Andrew made some comment like, "Oh! Oh!" and I thought...and I felt bad because I could see this in his eyes. But five minutes later!

[Had you come on stronger than you had intended to? Or why did you feel bad about that?]

> No. Because it just really crushes me whenever I make a child feel bad. Whether I meant to or not. I feel bad after I've done it. I really do. At the moment, I was mad and I didn't care if he sat down there and cried and cried. But after I'd said it I thought, "Ooh..."
>
> But he just pushes me to the point where I just can't...something snaps and I just can't handle it any more. I've got to blow! {very long silence, then softly}... Then I feel so bad about it.
>
> But within two minutes, he was back doing nothing again. It was just... He was really... Then he was joking and laughing away. So no, if he would only....{stops}.

That Mrs. Wayne is exasperated with Danny's talking-out comes through very clearly in her conversation. True to the word, coming from the Latin ex--out, and asper--rough, Danny does make it rough for her to carry on with her lessons. Over and over again, despite the politest reminders or the sternest reprimands, Danny persists in talking out loud in the classroom. This single habit aggravates Mrs. Wayne many times a day. "He always has something to say!"

Some of Danny's comments, selected at random from transcripts of many different lessons are:

> Danny: I thought Scottish people spoke Scottish?
>
> [To which Mrs. Wayne made no reply, although she may not have heard him.]

***

[Comment made after Mrs. Wayne introduced the names of two boys in a new story about surviving in the Arctic. She had asked: Which name do you think is the Indian boy's name: Awasoo and Jimmy?]

I think Awasoo will be safer because he knows the woods better.

***

[Comment made aloud when children were pretending to sign land application for homesteads in Alberta.]

I own this part of land. Here in the classroom, right around my desk area!

***

You always have to cut the tree as low as you possibly can.

[Comment made when Mrs. Wayne was explaining how the homesteader's notched the trees to fell them. She acknowledged his experience in woodcraft.]

***

Mrs. Wayne asks the class: What else would the homesteader use the windlass for?

Danny: {calling out} I know how to set it up! I know how to set it up!

Mrs. Wayne: {turns to him slightly and nods}

Danny: They took three poles, set that up like that {gestures a tripod position} and they would put the string on and tie it up really tight and then they'd put a bucket on the other pole and just tighten it and let it down.

Mrs. Wayne: Okay. Now, boys and girls...

***

Danny: I know one reason why...another reason why they put rocks down in the well. You know how logs float? You put it down there and it could float up to the top!

Mrs. Wayne: I think they would nail it in.

***

Danny: I fell in a well in Seebe Lake. It had a top on it but the dirt...I was walking by the well and the dirt caved in and I started sliding down. Lucky, my dad was walking by me.

Mrs. Wayne: That is something to remember, boys and girls. Wells can be dangerous.

Danny: {slightly resenting the implication that he was at fault} I knew it was there. I wasn't curious. I was just walking by and the dirt... the well was empty and it had been there for about five years and it hadn't filled up yet...

Mrs. Wayne...Okay..

Danny: It started to collapse and I started to go in.

Mrs. Wayne: There's an example of somebody who wasn't being careless or curious and was near the well and it caved in. So, be sure you are careful: stay away from wells. Okay. {Many hands waving} Okay. We will have Sarah and Rose and then that's it!

***

Mrs. Wayne: I would like you to add the prices of all the homesteader's groceries and see what it comes to. Add it up!

{Chant of numbers on the blackboard being added}

Danny: Four dollars and twenty cents!

Brian: {stunned} He's finished adding it up!

{Adding continues}

***

[At culmination of science lesson using geometric shapes]

> Danny: {his raised hand acknowledged} When you go home, you could do that with your family. You could make any shapes or use any objects.

***

Although the full context of antecedent and subsequent comments are not included here, it is possible to discern that Danny takes a very active part in the lessons. He brings his past experiences to the topic at hand, offers extensions to what is under discussion, suggests applications of their experiences in school to their lives outside of school, and responds quickly and enthusiastically to what is being discussed. He would thrive in a tutorial situation. Unfortunately, Mrs. Wayne has a commitment to all the other children during these discussions and has perhaps exaggerated the degree to which Danny "always has something to say". However, the point is that Danny is *in* the lesson in a way that few other children are. He wants to make the pedagogical exchange a very lively one indeed.

Whether Danny is gifted can, of course, be debated. I have no evidence one way or another. But Mrs. Wayne herself says, "He's smart!" and part of her frustration with him comes from his not doing written work as conscientiously as he should. But this, too, is a characteristic typical of gifted boys in particular. In this, is an irony. Mrs. Wayne has said to him, "You are not proving to me that you know what you know." But how does she know what he knows unless he has already proven it to her?

Another part of the difficulty in the relationship between Danny and Mrs. Wayne may stem from his eagerness. Danny has assumed full partnership in the pedagogical process. By doing so, he interferes rather consistently with Mrs. Wayne's own sequence of ideas. At times, she does appreciate Danny's contributions for the opportunities they offer for extended discussion and thanks him with a smile or a compliment (infra: 569). At other times, his comments lead to areas that are not seen as important or do not merit consideration in the time allotted for the lesson. There may be an implicit power tug-of-war going on between them. Mrs. Wayne invites comments from the children; Danny eagerly rushes in. Mrs. Wayne extends the discussion; Danny takes it further still. Mrs. Wayne terminates the discussion; Danny cannot resist adding a coda.

To continue with the analogy of the foal introduced in the description of Rob, the quiet child, Danny is a foal that has found his legs and rejoices in the freedom this gives him. He gallops everywhere! And Mrs. Wayne never knows quite where or when he will race through. When she says, "He just hasn't learned social skills", she may mean she hasn't been able to lead-him-to-halter yet, to the conventions of raising his hand in request to participate in the lesson, refraining from speaking aloud unless invited to speak, keeping close to the topic, and foreshortening descriptions of related personal experiences. Danny circumvents these social amenities and charges on. He *does* give Mrs. Wayne a rough time.

But if Danny is a gifted child (he certainly is capable), he is not being allowed to function as one. Each time his contributions are ignored or treated impatiently, he persists in making yet another and another. He may be trying to stake a claim for himself. Mrs. Wayne says, "There is no lack of intelligence." But there is a twist in what she says: "You've got a good brain in your head and you better start using it." *She* means behaving and completing assignments. But Danny thinks he *is* using his brain. Over and over, he is trying to show just this. Mrs. Wayne is measuring him by one semiotic measure--written performance. Danny is using another--oral participation. Their semiotic bridges do not meet. Their mutual frustration lies at this disjuncture.

***

Nancy: A Change in Self-Image as Semiotic Trauma

[I am interested in what was happening to Nancy this morning. Why was she so distracted most of the time?]

> Mrs. Wayne: She's having problems in arithmetic and I don't think she is used to _having_ problems. It makes it difficult for her. It frustrates her. And her work isn't very neat. I talked to her about it and showed her how to be sure that her columns of numbers are all aligned properly. The whole exercise wasn't that easy, so she started writing notes. I said, "You _know_ those aren't allowed," and I took them away. She just wasn't in the mood to do any work, I guess.
>
> She has been having quite a bit of trouble in math this year. Several times she has had problems and I've had to have her Mom work with her and give her extra help. I don't think she is used to that. She has _always_ been a top student. All the way through it has been so easy for her. She has to learn to discipline herself and when she has problems, to work on it.
>
> I think it is _good_ for her. I think it is good that she is having some trouble. That's the way most of the world works for most people, isn't it?

Like so many children, Nancy came to school with a bag full of semiotic experience. She has very supportive parents and a younger brother and an older sister who are both doing well in school. Her own primary grades were marked with comments: "Excellent reader" "Doing exceptionally well." "Outstanding work, Nancy." "A pleasure to have in my class." "Excellent work habits." "Recommended for enrichment classes." "Most impressive project, Nancy." When everything she did was touched with gold, what more did she have to do?

Although the knowledge is often held only implicitly, Nancy is a child all teachers know: Nancy was an outstanding student in grades one, two, and three. She was perhaps less outstanding in grade three but her well-earned earlier reputation carried her forward even then. But now in grade four, things are less perfect. She is having difficulty in math. But the interview with Mrs. Wayne was held in October; the year is just beginning.

Nancy's semiotic repertoire (full of the benefits of excellent nurturing, considerable travelling, frequent dialogues with adults, and her own innate curiosity) is being used up. At the same time, as Mrs. Wayne observes:

> The other ones who haven't had all the advantages at home are catching up too and thriving on it!

The taken-for-grantedness of Nancy's early advantages have not given her a continuing semiotic reserve: she has not developed the study habits that others less "quick-off-the-mark" had to develop in the early grades. Where Nancy's broad background of first-hand experiences and well-developed reading skills gave her a euphoric glow in those years, the discipline of study habits was being absorbed by the others. Nancy is without this now and turns to sending notes to her friends because facing her learning difficulties calls for a concentration she has never had to give before. The semiotics signs on her report card now read or imply, "Needs to spend more time on her math." "Should do some extra studying in science." "Could do better." "Room for improvement." Nancy has never had to learn this language.

Perhaps for the first time, Nancy is facing what many children face continually: the fact that there are many things that are more difficult to do than others. Now in grade four, Nancy is facing problems in her school career that do not easily resolve themselves. This is a critical sign for her--her first sense of inadequacy. The world is more than she thought it might be. It challenges her in a way to which she cannot readily respond. Now she is faced with her own self-identity. The person she thought herself to be is now somehow different. So is the world she is encountering.

There are edges of uncertainty now. The blurred boundaries around what Nancy thought she knew or could easily learn have become hardened, more resilient to her approach. Instead of encompassing her as before, "knowledge" now throws her back upon herself. But *she* is not resilient. She does not know how to be resilient, to leap back into knowledge. She is faced with a different self from the one she knows. Caught in this transition period, Nancy must now learn what many others have always known: that the puzzles of the world can be difficult, require considerable effort to solve, and occasionally cannot even be solved. This is a new experience for her. It is not as if she has never met challenges before. Nancy is an outgoing and adventuresome child, physically very capable, creative, and self-assured. What she faces now is the challenge to her mental ability. She does not know nor does she recognize these new territories. She has yet to discover their mysteries and her own way of coping with them.

Perhaps more than facing the mental challenges and the triumphs and disappointments in her academic world, Nancy faces the resolution of the kind of person she is and will be. How will she cope with difficult problems, with insurmountable dilemmas, with those things in life that she may never understand? Some children live on this pathway all of their lives, ordinary, well-motivated, diligent children who do not find the world they live in easy to cope with. They make friends with the world nonetheless, perhaps because they have always had to struggle with unpredictable outcomes. Who is more fortunate? They or Nancy? Who will be happier? If we must ask, then who will contribute more to the world? Nancy, with her capabilities and temporary dismay? Or the child who has never expected more than the working-path to success, no matter how meager?

Can it be that a child would reach grade four before coming to a confrontation with this common reality? Cumulative files in every school would reveal that there are many children whose records show just this syndrome: an accelerated rate of learning in the primary grades, a plateauing at division two, and possible difficulties thereafter. These are the bewildered children in division two, the frustrated children in junior high, and the hostile young adults in senior high school.

In exploring this issue with me, Mrs. Wayne highlights some of the difficulties:

> If we label a child as average or lower too early, we can set up expectations that limit them. Or if we say the child is bright, we can create all kinds of illusions that the kid and his parents get tangled up in when the marks start coming down.
>
> Nowadays, parents think they have a gifted kid. Lots of them do. Then in grade four, you hit them with: "No, your child is not a genius." "Oh? I had one *last* year."
>
> I remember so clearly an interview with some parents last year. They were convinced their boy was just brilliant. Terry *was* smart, just like Nancy. But he had absolutely no work habits and, as far as I was concerned, he was just a good average. But they had taken him to places like Fort Edmonton and talked about it. And Terry could *outtalk* anybody, but when we got down to basic academics, he was just very average. It was hard for them to understand that too, because teachers all along had said how bright he was.
>
> This puts the parents in a double bind. They figure he is great! And he *is* but not at the level they have been led to believe. Now they wonder about *me*! "Hm? He's been great up to

> now. Why all of a sudden in grade four is he not great any more?" Well...{smiles and shrugs} because he has to do some work in grade four, that's why!
>
> You can be as brilliant as you want and you're not going to make it in the world unless you put your mind to it and work at it. I've seen people go through university and they are not really that bright--just very average--but because they want to, they'll sit there and work. Kids with good work habits are going to make it, one way or another.
>
> I've seen other people who are brilliant but they've never been challenged and they've always been able to get through easily. They just don't have the work habits to build on. They have never had to sit down and study or do extra work. So they have never learned how. Most of these kids may never get to where they could be.

It is clear that Mrs. Wayne believes good work habits are critical to a child's continuing success in school. In fact, Mrs. Wayne remarks that it is good for Nancy to learn that she will have to apply herself. But already in Mrs. Wayne's voice and in the voices of all her teachers, there is the inference that Nancy will have to "buckle down".

The only problem is that Nancy and many others like her have learned and have been encouraged by their teachers to love free-flying. They do not know how to "buckle down". In a peculiar twist, at the time when these children most need them, their teachers are turning the children back upon themselves. But within themselves, these children find that they have little or no resources to draw upon. They have not learned to learn. What has become a cliche, a mere jingle in educational circles--to teach children to learn to learn--is critical in children's lives.

Tragically, the children's early legacy has misled them. And more, their teachers have betrayed them. Too often, they stepped aside: these children do not need instruction. They do not need monitoring. "When you've finished your exercise, you may do free reading or work on the puzzles." "That report isn't due until a week from Thursday." "No, you don't need to include a reading list." "There's a book in the library. That should give you enough information." But these activities are play for these children. Loud and clear, the message to these children is "School equals play." Easy, unimportant, and unstructured. If it challenged them, it was only as an exercise in intermittent curiosity rather than in purposeful learning. Grade four is the watershed. Play is no longer enough. What is learned so easily by so many before this grade is disconcertingly less obvious, more difficult and, for some, eventually impossible.

Their extensive experiences, wide reading, and confidence in conversation are necessary but do not necessarily provide the nourishing ground for more abstract learning, for the hard work of learning, for the disappointments and frustrations that are an integral part of learning. It is precisely here that the teacher's responsibility lies.

in finding the critical moment for each child when the shift must be made from the child's being to the child's learning-to-be.

As if this fall-from-grace were not enough, Nancy has to look at the girl she sees in the mirror with new eyes: Something has changed, but why? Why is the once happy, curious, carefree, exuberant girl no longer praised by her parents and by her teachers? Where did she go? Who is this girl in the mirror, the one who so annoyed the teacher today? Who couldn't understand the new math concept, no matter how hard she tried? Who didn't want to write neatly because no one had ever said it mattered before? Who is this girl whose parents no longer praise her but continually nudge her to "do more"... when, seemingly moments before, whatever she did was good? How did all this happen? Why did it happen? The girl in the mirror is still me. I don't understand."

Stories like Nancy's should never have to be told. It is too late when you are nine years old to discover, for the first time, that the world is not yours for the having. But if such stories must be told (and I believe that they must) then their value lies in helping teachers see what can happen to a child when illusions of achievement continue to build until they are confronted with reality.

The Class as a Semiotic Whole

From the preceding discussion, it is evident that no teacher can engage in a pedagogical relationship with her students without considering them as individuals. The weight of that individuality is also clear. As much as any teacher can, Mrs. Wayne tries to meet the children's individual needs, both personal and pedagogical. But the meaning of a grade four classroom resides as much or more in the totality of all those individual children, in the group of children. As a group, they take on an identity that is the composite of all the personalities, behaviors, and attitudes that each brings into the classroom. These influences interact in a unique way with the teacher responsible for that particular grade in that particular room.

The teacher's perception of "her class" has a great deal to do with how she approaches each day with them and how she conducts the affairs of pedagogy during the year. This perception may begin even before she has met any of the children in the teacher-student relationship. Frequently, the teacher has been a member of the staff for some time. She or he has come to know many of the children through extra-curricular activities, from being in the same building, or chatting with them on the playground during supervision. Whether the teacher is a continuing staff member or new to to the staff, she or he will have had conversations with other staff before meeting the class on the first day of school and will have gained some sense of the class as a whole. Some classes are eagerly awaited. Different teachers have commented on this phenomenon.

> The grade two teacher down the hall has a terrific bunch of kids. She's having a great time with them and gets so much done! And she knows how lucky she is too. I only hope I'm still around when the kids get to my grade and that _I_ get them. Wouldn't that be great? You sure _need_ a class like that every now and then.

•••

> Each class has a whole different character, doesn't it? My last year's class was super. Oh, they weren't that bright, although there were a few who were very bright kids. Academically, I only had a half dozen with an I.Q. over a hundred. They were just very, very average. But...oh, they were nice kids! The grade six teachers are sure lucky this year.

Other classes are less eagerly awaited. As one teacher says, "There seem to be vintage years of children. And then there are others!"

> There was just that batch of them. They went up the grades together and everybody commented on that particular group. _What_ a group they were!...No one wanted to be assigned to them but of course somebody had to take them.

When class lists are made up in June for the following year, teachers often engage in a semiotic barter system as they make decisions about placing children of the same grade level in different classrooms:

> If you take Bernie, I'll take Jamie. From what Mrs. Goodman has said about them, I think they should be split up this year. What do you think?
>
> ***
>
> Let's see? You have real heavy load with that group of kids who can't read very well, so you'd better balance them off with some good readers. Then they can work independently a little more while you work with the others. Why don't you take Alison, Brent, and Laura?

This decision-making is carefully considered from a number of different perspectives and for a number of different reasons: the creation of as compatible a group of children as possible in each classroom, grouping children with particular needs, and distributing children who have behavioral problems; balancing the teaching "load", utilizing the special interests and talents of the staff, or alternating a teacher's past heavy load with a lighter one.

Each teacher hopes that the final composition of her class will result in a group of *nice* children.

[What do you mean by "nice kids"?]

Mrs. Rymer: (laughs) Oh, I don't

> Care about how everybody else feels. They are very sympathetic to any problems if anybody is crying or having trouble. They are right there to help them. They are encouraging each other, always. They say things like, "Robby, that's a really great picture!"
>
> If I happen to say "I am getting a headache," there's some sign that they care. They'll just settle down right away to help out. They don't talk out. They wouldn't think about talking out because it's rude and disruptive. I tell them that if you are disrupting a class, you are hurting people's chances to learn. That kind of thing. Nice kids don't think about making it tough for you.

Very clearly, a "nice" class has respect for its own members and for its teacher. There is a mutual caring. The children care about learning and about doing well in their studies. They also maintain a watchful regard for their classmates, giving solicitude or attention where they see it as helpful or necessary to help others learn. The teacher maintains a broader guardianship, an ongoing pedagogical concern for each and every one of the children. This joint commitment implies that there will be relatively few disruptions and that the focus of classroom activities is on everyone learning as much as possible. Under these circumstances, a teacher will appreciate this semiotic harmony and derive her satisfaction from a professional job well done. When this occurs, both teacher and children have a "good" year.

> Mrs. Wayne: That one year, I had all those good kids. They weren't all bright but they were all good workers. They learned so much! Their marks in every subject went up. On the year-end tests, every single score on the math tests went up a minimum of ten percentiles. And I'm convinced it was because we were able to do so many things. The grade sixes were doing junior high math: some of the ratios and percentages. We were really rolling! Oh! I taught!
>
> They were always bringing things like pictures and models and magazine articles about what we were discussing at the time. They taught each other. I'd look up and there would be Jennifer explaining something to Melinda, or David would be helping Jeff with his social notes. He'd be reading them off the blackboard so Jeff could get them down before the class ended. All kinds of things like that. It was just fascinating to watch. The whole class learned the whole year!
>
> But that is very rare! It's what teaching should be...and I think that's what spoiled me...because I know what can happen...what should happen.

It is easy to catch the sheer joy in the teacher's voice when she says, "Oh! I taught!" What teacher ever wants to do more? But it is just as easy to catch the dismay and frustration in last few statements. "Very rare!" Why is such a rich and rewarding pedagogical experience, for both the children and the teacher, so rare? What is happening in some of our classrooms and in some of our schools that continuous pedagogy should now appear to be the exception rather than the rule? Why does this icon of a successful teaching experience become such a treasure for this teacher? Why does it point to something that (as readers) we appreciate and acknowledge as pedagogically good yet know is seldom achieved?

Some interesting insights into this dilemma come from a taped discussion in May, 1983 with a group of elementary teachers representing kindergarten to grade six. Excerpts presented here highlight the complexities symptomatic of significant changes in our society that surround children coming to school and are such an integral part of their being. Although the questions posed here are not specifically phrased as "the teacher's interpretation of the class as a whole", the teachers' comments do imply that there are significant changes in enough of the children of a class to affect the ambience of the whole.

> [What are the most important influences on children coming to school now? For example, the children live with teachers for ten months out of every year, year after year. Do teachers matter in the shaping of the children's lives?]
>
> Special Education teacher: But they have lived for six years before that! I think the home influence is the stronger.
>
> Grade one teacher: The Catholic Church, for example, says: Give me a child until he's six and he's mine for life." Until they are six, the parents are shaping them.
>
> I think the kind of person they are going to be is already established by the time they come to school. I don't mean that that can't be improved upon or that they haven't learned

any wrong habits either but the kind of person they are going to be is pretty well set.

Grade two teacher: I don't know. I don't know if I can agree with that. If you give them a good role model to look up to, you re going to have some effect. Granted, they will always be returning to their home scene and if it's a bad situation then it's obviously going to have a great influence on them. But I don't like to think I don't have any effect on the kids.

Grade one teacher: I agree. You like to feel you have some effect on how they look at life or how they learn but not on them.

Grade four teacher: I like to think I influence how they feel about themselves. Some of them come into the classroom feeling that they're stupid and that nobody likes them. I try to emphasize that everybody's a real neat person.

Grade one teacher: I think that's great! They don't think well of themselves unless someone else does.

Grade five teacher: There are lots of things we can model: the self-worth concept is important because that's where it all starts. But I sometimes wonder about the lasting effects. Still providing a positive model for even five hours a day has more effect than we sometimes realize.

Special educ. teacher: Especially if there's a real void at home.

[Given our societal shifts, do you think teachers are becoming more important in modern society?]

{Much general agreement}

> Grade three teacher: I think teachers are facing the need to providing more of a mother-role than ever before. Quite a few years ago at another school, a mother came to me and said, "My child likes you better than me." I looked at her and said, "Then I am a failure. If I haven't conveyed to your child than you are more important to him than I am, I have done something wrong." But now you can't take that stand any more. You have to take the mother-role. You have to listen to their problems and support them like a mother should.
>
> A couple of years ago, another mother brought me a Christmas gift. She said, "You know, you and I at this time are the most important people in my child's life." And she's right. I think too that in the kind of society we are working in now, we have to work as pseudo-parents. We can't help it. You can't back away from it. Who else do the children have?

> Grade five teacher: Something else has happened related to that: Whereas our number of hours with the kids hasn't changed, school is a greater portion of a child's life than any other single individual. Moms probably get five hours (if they're lucky) and teachers get five hours. Daycare, if the kids are young, gets the biggest time share. The kids' time is split up into many more groups. Ours [the school's] is more significant because of that.

[As devil's advocate: suppose I said that being a pseudo-parent is not one of my professional responsibilities. You're expecting too much from me. "Society's dumping..." What would your reaction be?]

> Grade five teacher: I think you're right. We have to be pretty careful about how much we are involved. If we become too involved in their lives, they are going to lose respect for the teacher, whatever respect they may have.

Some of the kids will go around calling you by your first name. Some teachers accept that; others don't. But it does go right to the point. You are a teacher. The kids have to be aware of that. As teachers, we can only accept so much from outside. I don't think it's totally our responsiblity. The parents certainly have to take their share of responsibility. I really would like to teach.

Grade one teacher: There are a lot of things that parents are just assuming that school should teach: drug education, sex education.

Grade six teacher: That's true. Certainly in the majority of schools.

Grade three teacher: We have a different kind of mother now too. At first, when we had divorced families, the mothers dedicated their lives to their children. They said "I am responsible. I am going to do the best I can." Right now, the mother is saying "I have a life to lead too. I have a child and I am going to look after him but, after all, I'm a person too." It's different from what it used to be.

Grade four teacher: I think too that more and more children come to school emotional disturbed, if we can call it that. In some communities, it seems worse than in others and I guess you can't compare. But in some communities, there seem to be more stable families. Not all are two-parent families by any means. But they seem to be more stable adults. I think the socio-economic aspect is part of it now. We have more on welfare and unemployed than ever before. It definitely aggravates the problems.

You have to make exceptions, of course. You certainly can't say that all low-rental children have learning problems or all the kids who live in houses, the "crescent people" is what they are called around here, are good. But most of them are.

Grade five teacher: There are other problems too. I've heard of cases where children have to stay two or three days without a grown-up or have a slightly older brother or sister looking after them most of the time. That's a growing concern in some schools.

[Does it becomes the teacher's responsiblity to report these cases to other agencies?]

Grade six teacher: It's a legal requirement. You must report any suspicion of neglect. You can be held accountable if you don't. If you have reasonable doubt, you must.

[Does that worry any of you at all?]

{General agreement}

Grade five teacher: We have to worry about this type of thing. I had one student this year... she came to me with bruises on her arm. I gave the information to the nurse. But before I did that, I had to make some pretty serious judgments: What was the girl saying? I knew a little of the family background, so I had some doubts. But another part of my mind was saying: "There shouldn't be any doubt." Then, I had to say to myself, "Am I interfering with that family's personal life? There are enough problems there right now. How much interfering do I do? I know there is a moral obligation to report this type of thing but then it's a matter of interfering with lives that doesn't have too much to do with the educational process and the teaching of the curriculum.

[If all this is so much a part of the child's life and is a predominant undercurrent, when do you teach?]

Grade one teacher: Over it and around it and through it!

> {Everyone laughs}
>
> Kindergarten teacher: Depending on the age of the child, I think that facts take priority over teaching. It is more important to do these kinds of personal development, emotional development with the kids. The teaching will have to come second, especially at a young age. That's more important.

The words of these teachers tell more eloquently than any analysis could that the world of the classroom is exceedingly complex and decidedly not self-contained. The children who sit in our classrooms may have a great deal more than "learning to read" on their minds. Fact does take priority over teaching. Perhaps the only alternative for the teachers (since they cannot solve society's problems as they affect the children outside the classroom) is to laugh with a kind of good-humoured bravado and get on with the job of teaching. Perhaps for many children, the school is the only haven and, perhaps for them it is the only route out of the problems that beset their families at this time. "Who else do the children have?" There appears little hope for optimism but little purpose in defeat. Teachers' determination to create the best possible world for these children within the classroom may be the only feasible approach.

There are a number of symptoms that children exhibit that may stem from their uncertain place in their families and in society generally. One is that the some children tacitly remove themselves from all responsibilities of "working" at their school work. Mrs. Wayne describes two boys who will not make this commitment and the effect that this has on her:

> Mrs. Wayne: Clint and Brian have problems. They can't do anything but they don't even care. They don't even try. They just sit there. I could give the instruction six times, they don't care. They really just sit there and I get so frustrated. If kids are low, (intellectually) they could be really low and but if they work I don't get frustrated with them. I can manage it. But the ones who don't even try, I find that really hard. I really do!
>
> {deep sigh} I guess I am just old-fashioned enough that I believe in the work-ethic. They've got to learn it somewhere. {very softly}...I don't know...Maybe it isn't fair, if they're not getting the training at home...if the parents aren't expecting them to do anything at home and if the parents aren't doing anything...? Maybe they come by it naturally.
>
> {with more confidence} But if they don't have work habits, they are going to be illiterate! That's just all there is to it. There isn't much individualization after they leave grade six. If they don't develop good study habits here, are they ever going to get better?
>
> I get so frustrated because I have twenty-seven kids in this room and I have four who aren't listening or doing anything. It's my duty to get them to learn. I wish I could! I wish too I could spend more of my time with the ones who really want to learn. They could just go flying if I had the time to spend with them! I get really upset about that...{voice very low now}. But I can only...

The pedagogical responsibility that a large class places on Mrs. Wayne is evident. When I asked her in November to describe herself in three or four words (as she had done for a number of the children), she answered:

> Caring...intelligent...energetic...eager, I guess.
>
> But it's hard to describe myself, because it's...like something moving all the time. It's not just something [a personal quality] that is there and I think about it. To me that is what I see myself as. How I see myself in my mind. I see myself teaching in my mind as moving all the time...trying to do the right things at the right time.

This is a symbolic image and a true one of most teachers: moving to be with each child at the moment that is most propitious for the child, moving through the curriculum, moving through the child's world and leading them into the classroom world, moving individuals into a harmonious group, moving in a caring way. By her own description and confirmed by my own observations over and over again, Mrs. Wayne is a caring, intelligent, energetic, and eager teacher. But faced with a large class, in January less than half way through the school year, she would say:

> I feel drained with this class. Last year, I could have done anything with my class! I couldn't get them really fired up about anything, but they were a really good class. As soon as I said, "Listen...", it was automatic. Not this group. They never stop talking.

> Today, they were so hyper. I didn't even have time to think. I've had to start a plus-and-minus system, rewarding them for good behavior and... well, you know. But I didn't even have time to take out my plus-minus chart!

This is more than a day-in-the-life-of a teacher. This is an accurate description of the class as a whole, reiterated by the science teacher, the substitute, and by the children themselves in their conversations with me. There is no clear approach that allows us access to the reasons for this persistent talking. It could arise from the children themselves, from a power-play in the teacher-children relationships, from the influence of one or more of the children, from the influence of the teacher's attitude and behavior toward the children, or from a complex web of causes. It is possible to speculate that all the complexities of the child's life outside the school also are significant contributing factors. Has not our permissive society allowed these children to go-their-own-way but now, faced with its own adult problems, has it not abandoned the children? Abandonment implies a loss of hope. Have these children lost all hope in the pedagogical experience because it does not, can not, proceed in an unbroken and meaningful sequence?

> Mrs. Wayne: I think it's almost the personality of a particular group of children. If you look at the grade five class I had last year, they were such an easy-going group. If there was one that was bad, like Cam...a kid who came in later could have been a little brat...

> But nobody in the room would give him the time-of-day if he started misbehaving. And I think that is the real key between a classroom where there is a bad group and where there isn't. All you need is two or three or four and if the others tend toward that, these will pull all the others towards them and then you've got a real problem.
>
> To get that under control again is really difficult. But if you have two or three or four and the others are way-on-the-other-end of the spectrum, they can help you hold it in check.
>
> My last year's class didn't want to see Cam throwing things and wouldn't laugh at him and wouldn't complain. They didn't need to do that to get attention to themselves, like, "Cam threw something." or "Cam's picking on me." If they did that, Cam would be getting all the attention he wanted because somebody tattled on him. It would have put the spotlight on him but the kids just ignored it and so he would stop misbehaving.
>
> It depends on the group of kids you have. It's a very delicate balance. It can go either way. And a teacher can't do it alone. It's like you almost need...a catalyst, a group of kids that say...or act...like they are not going to put up with that in their classroom. They are not going to react to that kind of thing. Then you are fine.
>
> Sometimes, it can be only one child. He can make all the difference, tip the whole class off-centre. Once I had one boy move away. The whole atmosphere of the classroom changed. Just with one child. We all had a great year after that!

The solution wasn't that simple for Mrs. Wayne this time. One child did move out, but another one with different and powerfully affecting problems moved in. The entire school year was a struggle between what Mrs. Wayne always hoped she could accomplish with this class and what could actually be done. The class is an entity onto itself. The teacher is only one of the factors of its composition, a very important one but not necessarily the decisive one.

However, the semiotics of the class as a whole does create for all the children a particular pedagogical environment and the possibility of or restriction of pedagogical opportunities. Many classrooms in many schools are torn between the professional ideals of the teacher and the harsh realities of what the child is and what commitment the child brings to learning. What has not been discussed here is the effect of this on those children who come to school with genuine eagerness and willingness to follow the teacher's lead to education. What is it that they learn in the confused and confusing milieu of conflicting intentions, contradictory standards of behavior, and frustrated attempts at learning?

Is this (at least in part) why some parents try to find alternative schools for their children? Is this why regimented school discipline and highly structured curricula have become increasingly popular? Is this why some children give up on education before they have even had a chance to know what it can be, what it should be? Is this why teachers leave the profession? Is this why there is a need for a plethora of inservice courses on effective teaching and classroom management? Is this why there is little noticeable change in any of the problems facing education today? Is this why capable young men and women are not considering teaching as a viable career for themselves?

If the possibility exists that any of these issues arise from what is happening in our schools now, what are we going to do? Retiring teachers have said that they are relieved to be leaving teaching. "It gets harder and harder every year." They are not just making reference to their own endurance; they are referring to the malaise that enshrouds so many of our young children. They see the impossibility of doing much in the classroom that can change any of this. "Sure," says a grade one teacher, "I can love him here. But is that going to be enough?"

Deep notes of pessimism sound throughout this section and yet they should be heard. It would have been possible (though less ethical) to have chosen from my transcripts only those notes and observations that highlight the successes of the class. There are many, and many of these have been described elsewhere. But the class as a semiotic entity has its own place in the telling of things. If we must look through the glass darkly, it is because there are still those who see beyond it with stolid hope and persistence. There are those who believe in public education and who strive to make it viable and true to its ideals. I count myself among them.

Part of the solution does lie with teachers. As the grade five teacher said in the interview earlier, "I really want to teach." Here is the key: teachers must teach. They must teach with such power, vigor, and enthusiasm that children become so captivated by what they learn and by the possibilities of learning more that they will hunger for more. If necessary, they will explore with the children the world of the mind when the world of the real does not offer enough. Children have creative minds and endless wonder. They bring these rich resources to the teacher. In turn, teachers must give the children their future, open alternative ways of thinking to them, pour from the wealth of media the good things of the world, and shout the praises of what has been accomplished and what can yet be achieved.

Perhaps after trying their best but not succeeding with some children, teachers must ignore them rather than sacrifice all children to a pointless tug-of-war and deprive them of what they have come to the classroom to do, to learn. Perhaps we need to keep the image of Mark, a kindergarten boy, in mind. When asked why children come to school, he answered eagerly,"So you can learn things."Asked how children learn things, he pulled his ears out sideways and said, "I just go like this..." Most children begin their school life with just such eagerness and naivete. They want to learn and they expect their teachers to make that possible.

The Significance of the Semiotics of Interpersonal Relationships in Pedagogical Settings

Whether it is the voice of the teacher describing her class as a whole or children as individuals, or the voices of individual children expressing their personal relationship with their teacher, it is obvious that the semiotics of these relationships are in a continual state of flux. The time, setting, and circumstance of their being together strongly affects the intimacy, intensity, and intent that is possible between them. Frequently, teacher and child, or teacher and class establish a harmonious ongoing relationship that lends a clear path for pedagogical success. Each is responsive to the semiotics of the other in subtle but convincing (if implicit) ways. Often this responsiveness is based on little more than knowing what the other is experiencing. This knowing shows itself as a sign of recognition in the eyes, a sign that the other person recognizes and appreciates. There is no need for words or actions. In that fleeting look, child and teacher see that the other does "know".

What comes through so clearly from the teacher's and children's comments is the need that they all have for that look-of-being-together. As often as Mrs. Wayne tells us she understands how complicated the children's lives are and how difficult it is for some of them to concentrate on their school work, the children comment on how they sense a teacher's excitement, weariness, dismay, or delight in the signs she gives them in how she speaks, moves, and conducts their lessons. Ironically, while they each speak of these insights to me (as a researcher), it is only rarely that they speak of it amongst themselves. Once as intermediary, I remarked to Mrs. Wayne that Bonnie understood how Mrs. Wayne felt when the kids "bugged" her because she (Bonnie) had a brother who "bugged" her all the time and so she knew what it was like. Mrs. Wayne's face lit up and she exclaimed, "Did she really? Well, bless her."

Many of the elements that go into creating a relationship between teacher and child have a long and complicated history, a designatum that is so engrained by the totality of their lives that there is little that can be changed in a pedagogical setting. In particular, Mrs. Wayne (along with many other teachers) is helpless in compensating for a child's difficult emotional family life or in creating success for a child who has a complex web of learning difficulties. Similarly, the children speak of understanding how difficult some situations are for their teacher to resolve. There appears to be a mutual appreciation of and respect for the complications of these insurmountable problems.

Interestingly, the children's individual relationship with their teacher appears to influenced by an intricate semiotics: their appearance; their attitude toward others, their work and their teacher; their work habits; their compassion and concern for others in the classroom; and their willingness to participate, to be obedient, to be patient and helpful.

While one can readily appreciate the complexities that face Mrs. Wayne in the children assembled to comprise "her" class, it is also inevitable that whatever group of children come before her their lives will be complex and that some of that complexity will invariably affect the interpersonal relationships of that class. A semiotic perspective of the qualities of humanness that the children bring to the classroom assists in clarifying some of the meaning that may be associated with these children. A particular "sign" as embodied in the child, in a sense, "calls" for a certain responsiveness on the part of the teacher. Each child is different and the teacher's pedagogical interpretation of this must move beyond the cliche.

For example, in describing Marnie as the exemplary student, the very designation "asks" for a specific pedagogical consideration: because she makes few demands on the classroom teacher, it is important to realize that she cannot be allowed to "drift" through the curriculum. Mrs.

Wayne can enhance Marnie's intellectual development by providing opportunities for her to assume leadership roles, to participate in peer teaching, and to become involved in exploratory and creative activities. These should not be seen as "more work" but rather variations in style, format, and context learning that offer her interesting alternatives and extensions. Since much of an exemplary child's work is likely to be done in the written form, there should be activities that include oral and performance modes as well. In all of this, Marnie's quality of work should remain high and free from undue pressures. She is already secure in her standing in the classroom and should remain so.

On the other hand, the semiotics of Brian, the non-achieving child, are important in a different light. He represents a seemingly increasing number of children who simply cannot overcome their deficiencies in fundamental learning. Large classes make it much more difficult, if not impossible, for the teacher to resolve this dilemma. The semiotics of Brian's behavior suggest that he, and others like him, should participate in a classroom of limited size where his specific needs would receive special attention. While during the week the learning resource teacher can help many children individually, their attendance is fragmented from what is occurring in the classroom. Although the one-to-one relationship with the resource teacher is highly desirable, it occurs in a world apart.

Recognizing the importance of this service in the school, there appears to be a need for a transitional class where children are expected to gradually assume more and more independence in doing their work while functioning as a member of a classroom context. These groups should not be permanent but should be created, according to the children's needs, for relatively brief periods of time. As basic skills and knowledge are acquired, these children would return to their own classroom and the regular curriculum.

Some years ago, a local school instigated a program during the summer months called "Project Catch-Up" which proved highly successful in two ways. It provided the small-group instruction in basic facts and helped the children "catch-up" on missing portions that provided them with strengthened skills for continuing into the next grade. Second, it helped children retain their learning during the summer months so that they began the next September with greater confidence to move into the new curriculum. The program made a significant difference for a considerable number of children by giving them a support system at a time they most needed it.

Incidental to the program but an invaluable semiotic benefit derived from, it was the children's blending into the total class level without being identified (again) as "having difficulty", "needing to stay after school to finish their work", or being called "dummies". The devastatingly-obvious wounding of the child's self-image and class reputation was circumvented. Monies required to support the program were more than justified by the children's renewed interest and effort in their school work and by their personal well-being. The availability of such programs at the elementary level may well prevent more serious academic deficiences from arising at the junior and senior high school level. The impact of "Project Catch-Up" is seen in a shift in the child's behavior and in his perception of himself and his abilities.

Until the child who could be but is not achieving does see his own progress as a reflection of his own effort, he is faced with an insurmountable task. He gives up--only to increase with each year the distance between where he could be (i.e., where the class is working and beyond) and where he is stalled. When the classroom teacher has school services to draw upon as constructive alternative to solving the problem, she see this as a sign that she is not alone and her optimism has no small influence on the child. Brian and others like him, in all their self and group-distruptive behaviors, are calling for help. They should be heard.

Similarly, implications that arise from considering the "quiet child" must be taken in the same spirit as the semiotic characteristics he embodies. The quiet child, if pressured to become involved, will only retreat further from classroom activity. Subtle invitations to encourage his participation are likely to be more effective than definitive commands. For example, there should be opportunities for the quiet child to work with his friends but these groups should gradually change to include others as well. The teacher should be sensitive to the times when the quiet child is volunteering independently, acknowledge positively but calmly any such contributions, engage in spontaneous but not probing conversations with the child, and keep open lines of communication with him. Periodic eye contact with him during classroom activities may be the simplest and most effective way of including the child in a meaningful relationship with the teacher. The quiet child has his own semiotic aura but the teacher can hold the gate open for other explorations within the pedagogical setting. That invitation must never be an intrusion but rather a welcoming.

The semiotics of Danny who never stops talking ask for another approach. For him, perhaps the more constructive approach lies in giving him the responsibility to bridge the gap between socially appropriate behavior and his drive to learn as much as he can. Mrs. Wayne could challenge him to turn his contributions into letters, petitions, stories, forums or dramas. He could be paired with others to resolve a point of discussion or to find supporting or contradicting opinions in the media. Periodically, he could be given a platform to share his independent research with his classmates. There are others who are recognized as high-achievers. By harnessing Danny's genuine enthusiasm for learning, there might be a powerful surge in the accomplishments of many children. And Mrs. Wayne just might be less exasperated by Danny's "talking out".

Nancy's trauma of facing failure for the first time in her school career requires the greatest discretion on the part of the teacher. In their eagerness to treat all children equally, teachers should carefully differentiate their fondness for a child from the academic performance that the child exhibits on a reasonably consistent basis. This calls for a separation of the "sign of the child" from the "sign of the child's work". It also means withholding judgment on academic ability until there is sufficient semiotic evidence garnered to suggest a description that can be substantiated if need be. Parents should be helped to make the same differentiation: a child who cannot perform at a high academic level is no less a valued child.

In the classroom, the teacher holds very specific commitments to all the children. These include limiting praise to achievement that is commendable. Encouragement is of course every child's due. Public praise however carries a heavier semiotic message. It implies that all is well, more than well. This can set up conflicting standards for the child. For a time, "this" quality of work deserves merit and recognition. Now, it does not. This means a clearer separation between exemplary work acknowledged as a standard of quality performance appropriate for the age and grade level of the children and the quality of work that each child is capable of accomplishing. A single semiotic criterion cannot be used to judge all children at all time.

For capable students like Nancy, teachers obviously commit a disservice when they repeatedly accept poor quality performance. They must separate their relief at having such self-directing children in the classroom from the quality of work that should be reflected in the child's assignments. Further, they have a responsibility to ensure that a number of pedagogical conditions exist in their classroom.

1. Children who are verbally fluent, semiotically-capable, must continue to grow in their understanding of the world around them. The same curiosity that brought these children to such fluency should be nurtured further with specifically-directed explorations and attendant responsibilties.

2. The teacher should orchestrate a purposeful application of knowledge in a variety of written forms. This link between what a child can so easily speak of and what he

can express in written langauge is a critical one. It must be made during the elementary grades in a sequential and directed manner. This requires of the teacher the same pedagogocial commitment that the teaching of reading and the mastery of mathematical computation skills does. It cannot be presumed to happen without a teacher's guidance and instruction. In particular, grades four, five, and six should have as their main objective the successful mastery of fundamental functional written literacy. Where the emphasis is often on the children expressing themselves orally, the ability to use a variety of written formats with purpose and style is often overlooked or minimized. This approach does not provide the children with an adequate semiotic repertoire to approach increasingly independent studies in the higher grades. While the insistence on an appropriate level of written performance may appear to jeopardize the teacher-child(ren) relationship, the children's academic future cannot be built on semiotic affinity based on a personal accepting of the child without an adequate pedagogical development being provided for that child.

3. The momentum with which children work should be truly representative of the task and the child's ability and not a reflection of a learned semiotic that "speed equals performance". Bright children are accustomed to completing their work before all others. It is a mark of their achievement that they do "finish first". When this becomes so

engrained that "being first" takes precedence over doing the work well, the child is in trouble. Teachers have a serious role to play in helping the children balance their desire for personal classroom status (reflected in their speed) with a standard of quality work. If a child has become implicitly caught in perpetuating the image of being "first", the choice of not being first is too difficult for the child to make alone. The child will not trade time for reputation. It is for the teacher to create the circumstances that allow for quality work to be produced and to maintain its priority.

Paradoxically, fundamental to all semiotic relationships between the teacher and the children is the teacher's careful and deliberate weaning of the child away from dependency on step-by-step instruction and monitoring. As Mrs. Wayne rightfully says:

> You can only do so much as a teacher and then it comes down to the child. He's got to put some effort into learning. The teacher can't take all the blame or all the responsibility. If he is not going to listen, and not putting his effort into it, I can't make it get into their heads!

But if a child is to take responsibility, he must be taught how to do so and given ample opportunities where he is expected to do so. Although that some children may never accomplish this, it remains imperative that the process of self-responsibility be set in motion and sustained by the teacher for every child capable of assuming this role.

As the telling of the story of the world of the elementary classroom demonstrates, there is a wonderment of semiotic life in pedagogy. The simplest word, the most inobtrusive gesture, the slightest glance, or the sudden weight of silence, carries meaning from one human being to another with an almost infallible certainty. Teacher and child, teacher and class, create between themselves an intricate and continuous play of signs that confirms and reconfirms that they are involved in a life-process, mutually interdependent and interrelated. Each stands before the other as a sign, standing for them as something important, something to be respected and valued.

The teacher looks at the children assembled in her classroom and sees in their being, her professional responsibility and her pedagogical commitment for the school year. How she will honour that commitment depends as much on the children as on her. At the end of the school year, writing their report cards for the last time, she sees before her on the page an evaluation of how much she has been able to do for them as teacher, friend, and adult. In a curious way, those few marks on the report card epitomize their semiotic relationship. Given all the reasons why the teacher's influence cannot be considered pervasive in each child's life, there are abundant reasons nevertheless to see their journey through the pedagogical shoals and tides of the year as a reflection of their semiotic compatibility, of the degree to which their values, expectations, and accomplishments synchronize or diverge. There is more in their relationship than methodology: it is a human relationship that grows and changes.

Looking at their teacher, the children see "a sign" that stands for the expectations and values that society places before them. Outwardly, they see and respond to her as yet another adult in their lives, an expected adult with specific obligations to them. Implicitly, they place themselves under her governance and see in her actions and hear in her words, the signs of their own becoming.

There is in their relationship the symbiosis of two mutually dependent and interdependent beings. All, in their own way, come to that relationship from their "functional circle". They come together because of needs and expectations that only the other can respond to. This is more than a role that the teacher and the children individually assume. They are not "playing" at being teacher and pupil but live in that connotation as a totality of intention, behavior, and language. Beginning from bi-polar extremes as child and adult, uninitiated and knowledgeable, inexperienced and experienced, dependent and independent, young and older, ones to be controlled and their controller, explorer and guide--children and teacher begin a subtle and gradual process of "becoming", in a unity where boundaries become blurred and where the distance between them takes on the intonations of mutual affiliation.

In Peircean terms, teacher and children stand independently as a "firstness", separate and self-contained. The moment they step into the classroom that relationship changes because of the existence of the other. It assumes a "secondness". Teacher becomes teacher of these children; children become pupils of this teacher. It is a relationship unique and powerful. As that relationship continues, it develops an aura of its own characteristics formed by the routines and rituals that have evolved in the building of that relationship. It becomes a "thirdness" with its own conventions and contingencies.

The context of the "thirdness" of their relationship is derived from the "situational circle" which Uexkull describes as the social context which creates child and adult as a social group--acting, interacting with, and reacting to one another. In the classroom, it may be a one-to-one pedagogical relationship or one that evolves and sustains itself in the context and circumstance of the large class group.

It is in the continuous nurturing of these three distinctive but simultaneously integrative qualities--"firstness", "secondness", and "thirdness"--that the semiotic interpersonal relationships between teacher and children can contribute to pedagogical success.

Semiotics of Pedagogy

The pedagogical process between teacher and learner is multi-faceted. The combinations and permutations of what is undertaken, how it is to be accomplished, and the human interactive elements within that pedagogical act are endless. The elementary classroom teacher has the additional challenge of teaching children who may or may not be there of their own volition. They do not necessarily come to the classroom because they want to learn but rather because that is where they are expected to be at that time in their lives. Some children are very young in spirit and would satisfy their curiosity only through play. Some are already scholars, bringing an insatiable wonder to everything they see and experience, to everything they think about or imagine. They reach out for learning and grasp it with sheer delight. Other children come to learning with an abiding indifference that is not displaced throughout their schooling. A few come to school angry at the world and at their place in it.

The elementary school teacher comes to her profession with her own experiences of having been a student and adds to these her teacher education and practicum. Together with her own personality, special interests, and temperment, she stands in front of the children for whom she is responsible and begins. What happens at the confluence of the children's expectations and hers is what makes the pedagogical process. It can be and often is an exhilarating success (meaning from the Latin: completely gladdened or aglow with happiness and elation). Both feel the thrill of learning and the pride of being involved in that experience. Or conversely, their pedagogical experience may be awash with confusion and malcontentment. Or if the curious complexities of life are stabilized, it may be an experience with no remarkable characteristics or flaws.

The pedagogical interaction that a teacher instigates may be likened to a playground teeter-totter--its changing rhythm representing a cooperative balance and counterbalance that equally involves teacher and child. The variety of lessons (described below) illustrates both the success of such an exchange and situations where this does not occur. Part of the success appears to come from a particular semiotic harmony that is established, implicitly and explicitly, between the teacher and the children. The discussion of each lesson will attempt to elucidate the role of semiotics in promoting effective learning as a semiotic harmony or to point to the possibility of semiotic confusion being instrumental in disturbing the pedagogical potential inherent in the lesson.

The semiosis inherent in the lessons described in this section is typified by what occurs in the scenario below.

Mrs. Martiniuk, a grade two teacher, has just completed the guided instruction portion of a arithmetic lesson in which a differentiation is made between the rectangle and the square. Now the children are working independently on an assignment related to it. They are presented with a series of sketches of various objects and scenes and are to identify the appropriate terminology for the shape illustrated or described. Following this, they are to read mini-stories and decide whether the concept of rectangle or square is involved. For example:

> Bobby and his dad went to the lumber store. They bought boards that were all three meters long. Bobby said, "Are you going to make my tree-house that big?" "No," laughed his dad. "I will cut them in half when I get home."
>
> Bobby's tree-house will be a (rectangle or square).

Mrs. Martiniuk moves between the children's desks, checking their work and giving specific explanations where needed. Broadly, these comments are geared to correcting or refining the children's answers. In this, Mrs. Martiniuk uses words in their arithmetical context. She is using words like "compare", "length", "width", in addition to "rectangle" and "square" (words which the children have undoubtedly heard and understood before). However, now these words take on new significance. They are to become part of the children's vocabulary and are to be applied to problem-solving situations. As she helps a particular child, Mrs. Martiniuk selects relevant examples, demonstrates a procedure, or guides him or her step-by-step through to the solution. The semiosis of reaching the answer, then, becomes an model or iconic representation of the narrative episode given in the child's arithmetic workbook. In turn, this solution may be used as a guide in solving other similar problems. A semiotic pattern of understanding grows.

Later, lessons in fractional computations make the semiotic prerequisites even clearer. The fraction requires a specific format to carry its meaning: 1/2 is not 1-2 or 2/1 or 12. These are critical differences, conceptually as well as visually. The required specificity of arithmetic terminology and signs is akin to that of learning the phonemic and graphic representation of the spoken language--of learning to read and to write. In contrast, what is spoken can be rephrased, supplemented with gestures, and calls heavily on implicit understanding. The precision with which arithmetical concepts and their associated sign systems must be used is something relatively infrequent in a young child's life. Not only is this a new semiosis for the child, but it also requires a new attitude of diligence. Only in this way can the semiotics of a given discipline be mastered.

But other semiotics are inherent in this scene: socio-semiotics--those ways and means that individuals create to communicate with others privately and in a group context. Not all of this is verbal. In Mrs. Martiniuk's classroom, there is an implicit understanding that certain group behaviors will be predominant during this activity. For example, that the children will remain in their desks; they will signal for help by raising their hand; they will wait to be acknowledged; they will retain a serious demeanor during the lesson; and, finally, they will not interfere with the efforts or concentration of other classmates. This implicit semiotics is easily confirmed by an outsider. The children have consistent behaviorial patterns, i.e., they accept and perform within the context of these standards. In the teacher's encouragement or correction, there is also an explicit and implicit monitoring of these behaviors.

A clip from a video scene of Mrs. Martiniuk's class clearly shows that the classroom is very quiet. The values and expectations held by Mrs. Martinuk are honoured by her class. The children are concentrating on doing their work. Mrs. Martiniuk is checking Susan's work. She hears a sound-sign, looks up, and notices two girls talking several rows over. Moving quickly to the front of the aisle, she firmly repositions Ryan's head toward his work, then points to Peter's math sheet to redirect his focus. Turning down the aisle to approach Tracy (one of the girls involved), Mrs.

Martiniuk tenses her fist at her side. It is as if she does not relish having to correct Tracy or that she is disappointed or angry that she should have to do so. She establishes eye contact with her and holds it. Continuing to move toward her, Mrs. Martiniuk places her index finger to her lips, signaling that Tracy should be quiet. She then gives a referee's two-hand "game-over" signal, taps Tracy's book with her right hand, leans Tracy's head toward her work with her left, and gives a final pat on her shoulder. She takes one small step backwards, pauses, watches as Tracy resumes her work, and then moves away.

In a continuous flow of movement and gesture that took far less time to perform than it takes to describe, Mrs. Martiniuk signaled to Tracy precisely what her messages were. Not a word had been spoken and yet the values and expectations implictly held by Mrs. Marintiuk were carried in her nonverbal gestures and neither teacher nor child (nor observer) could doubt their meaning.

***

It is important to note that this brief, effective sequence of socio-semiotics in a pedagogical exchange was not captured because of any unusual acuity on my part as I stood behind the video camera. My intentions were only to film a general profile of Mrs. Martiniuk's monitoring behavior. Only on subsequent viewing and reviewing of the tape did the particular richness of the sequence become evident. Caught up in the moment of monitoring class behavior and the children's understanding of the concepts involved in their assignment, Mrs. Martiniuk was not aware of all her communicative manouvers. Nor did she identify the import of these gestures during her first viewing of the tape. Only as we looked at it together did we "see" the specific details of the sequence and unravel her implicit intentions and their symbolic value. This coming-to-an-appreciation of what was portrayed between teacher and child/children must also be understood as semiosis--a socio-semiosis--of people creating meaning for others, understanding the semiotics used by them, being influenced by this, and responding with semiotics of their own in an evolving and self-perpetuating exchange of meaning.

This rather extensive description of a brief segment of a video scene illustrates the complexity and subltety that is inherent in a seemingly ordinary teacher-child interaction. Careful analysis from a semiotic perspective does allow the uncovering of the multiple dynamics of ongoing classroom activities.

The lessons interpreted below have been chosen to represent various aspects of the semiotics of pedagogy. The focus shifts from the teacher to the children, individually and as a group; from a exact transcription of an audiotape to an openly interpretative stance; and from an exemplary lesson to a far less successful one. The lessons range from a comma lesson in which a basic understanding of punctuation is emphasized, to a social studies lesson during which the grade four children are invited to imagine themselves as homesteaders applying for land in Alberta. Included is a lesson on haiku; a creative writing lesson inspired by two very common media; and a science lesson that takes on a peculiar quality all its own. These are examples of the kind of events that can evolve as teacher and children set out to learn a given amount of information or to share in a specifically-designed experience. These lessons are not in any way to be considered as representative of the totality of experiences within an elementary classroom. They have been chosen as a means through which we can examine some of the complexities that are inherent in the teaching of elementary school children but they are to be considered neither definitive nor inclusive.

The interpretation given for each lesson is based on observations, conversations with the teacher and the children, audiotape transcripts of the lessons and, in some cases, on video tapes as well. The source of the interpretation will not be differentiated except where it is judged to be important in understanding the context of the discussion.

The Comma Lesson: Basic Skill Development

This lesson was taught by Mrs. Wayne to her grade four class on January 9th, 1984. This was the first formal lesson after the Winter Break. The children had been allowed considerable time to discuss their holiday experiences and to show their new acquisitions. Many Cabbage-Patch dolls were also in attendance but did not participate in the lesson other than to sit in the children's laps and peer over the edge of the desks.

The lesson might be best described as a semiotic procedural one. This is characterized in three ways. First, the lesson is based on a worktext exercise with clear and sequential phases to be followed. The format of the exercise dictates the format of the lesson. The teaching pattern is given and in this case is closely followed by the teacher. Second, the skill of using commas is itself a procedural action. It is a punctuation mode in which the specific mark that we recognize as the comma is incorporated as we writes. Third, the children are led through the lesson from an assumed unfamiliarity with the correct use of commas to independent exercises in which they apply the newly acquired skill. The lesson is perhaps the most common and predictable style of lesson and differs significantly in style and content from more open-ended inquiry lessons.

In order to emphasize the succession of teaching skills immediately involved, the first part of the lesson is described in the traditional practicum lesson-plan format: what the teacher does and says is given on the left side of the page; its pedagogical significance is given on the right. Throughout there is the creation and giving of verbal and non-verbal signs and the interpretation and extension of their meaning.

Teacher and Children Dialogue	Pedagogical Significance
Mrs. Wayne: {referring to page 59 of language arts workbook which each child has on his desk} This section is about "Using the Comma"	Direct introduction
Let us all read the first sentence.	All invited
Chorus: {reading} The old gentleman sold ice cream, popcorn, milkshakes and potato chips.	All involved
Who can tell me how the commas help us read this sentence?	Request
Lindsey: It tells us to read like this: ice cream {pauses} popcorn {pauses} milkshakes {pauses} and potato chips. Like that.	Child volunteers and demonstrates
{responding to his hand up} Tony?	Boy acknowledged
Tony: You don't have to have so many sentences. You don't have to say "Ice cream and popcorn and milkshakes and potato chips."	Boy's example
That's right. He is saying the comma is being used instead of the word "and" and in a lot of ways, that is right....{responding to Nancy's raised hand with nod}	Confirms Repeats Acknowledges with nod

Nancy: Sometimes...you wouldn't have to say: "The old gentleman sold ice-cream. Period" "The old gentleman sold popcorn. Period." "The old gentleman sold milk shakes. Period." {running out of breath} "The old man sold potato chips. Period."	Volunteers an example. Given empathically.
That's right. It also makes much more sense. When you say "ice cream, popcorn, milkshakes and potato chips", you get a little bit of pause between each one and it makes much more sense.	Confirms Reinforces
Now, it says: "Look carefully at this heading for a letter."....Okay? The heading is what you start out with. At the top...remember we did a letter one day, and we put our date, with our address, along there. And then we put "Dear...."	Directs to text. Reminds of past writing letters.
This is called the "heading" {writing it on the blackboard} and it includes your address. It includes your city and province. And it includes your date. {pointing to each as she speaks}.	Uses blackboard. Reviews Re-emphasizes
Now, show me where the heading is on the page.	Children find reference
Remember we never write in these books.	Rule reminder
Paul? ...No? ...Who can tell us where the commas are?	Asks, accepts that he isn't ready. Invites
Rob: After "Lane", after "Mountain", and the period after "Sea", and after "January". No...forget that. After "16". And that's about it.	Boy gives full answer, self-corrects
Okay. Thank you. So there are one-two-three-four in there. After "Lane" which is the... after the whole address. And Rob found all of them!	Acknowledges Thanks Summarizes Praises
Give me your address, Jimmy?...[Jimmy looks up a little bewildered] Give me your address.	Requests Assesses Repeats

Jimmy: {very softly} I don't know it.....	Boy admits he doesn't know
Okay...{doesn't persist to avoid embarassing him}...Paul?	Accepts Requests another
Paul: {eagerly} 97 South Oakplace. [Knows he's right]	Assured response
Cheryl, where will the comma be?	Asks girl
Cheryl: After "Oakplace".	Answers
{nods to her}...Give me yours...umm?..	Accepts
{scanning the class}...Tony?	Surveys, asks
Tony: 9588 Winston Avenue and the comma would come after the "avenue".	Answers fully Models after Paul's answer?
Good!...Nathan?	Praises, asks
Nathan: With mine, it would come after "Maxwell Court."	Answers fully
Good!...Now...{referring to the workbook} "Silver Mountain, B.C."...What would be the equivalent, if you were writing a letter? You don't live in Silver Mountain, B.C. Nadeen?	Praises Redirects Asks for child's application
Nadeen: {hesitating}...It would...be in... the mountains...	Uncertain
{very quickly} No, no, no. You don't...[as in "You don't understand."] Whoever is writing letter, in your workbook, is living in Silver Mountain, B.C. Where do you live?	Emphatically corrects Text world vs girl's world
Nadeen: Edmonton, Alberta.	Girl corrects
Okay, where is the comma going to be?	Skill emphasis
Nadeen: After "Alberta". No, after "Edmonton".	Girl self-corrects

Okay. After "Edmonton". {speaks while writing it on the blackboard}...We always separate "Edmonton" comma {voice emphasis as well}... "Alberta" comma.	Acknowledges Reinforces via visual and voice
Paul: Period, comma	Boy gives different answer
Paul just said "Period. Comma." When would I use the period-comma? I wouldn't in that case. When would I?	Acknowledges Corrects Requests
Danny: B.C.	Another boy gives different answer
Tony: When you put...well, you could put "Ed" period, then comma, "Alta" period, comma. "Ed Alta period comma."	Another boy Detailed answer
Okay...actually we wouldn't have an abbreviation for Edmonton. Sometimes we put it in, but there isn't an official one. So we wouldn't use that. But you are right on the other one. A-L-T-A. You must have the period and then you would have the comma. There, you would have the two. Yes? {acknowledging Danny's raised hand}	Acknowledges Corrects Refuses one Accepts part of answer Reinforces Summarizes Acknowledges
Danny: Sometimes...like in B.C.. it is short for British Columbia.	Boy return to his earlier answer
You are right. So if you had written out "British Columbia" then you would just have a comma instead.	Acknowledges Reinforces
All right. January 18th, 1980. {referring to the page}	Redirects
What would today's date be? And where would you put your comma? Rob?	Relates to now Requests Designates
Rob: January 1983.	Answers

And where is the comma?	Asks more
Rob: After January.	Answers
Danny: 1984.	Corrects
1984...Here is where your comma is: {sychronizing her speaking with her writing it on the blackboard}..January 9th comma 1984.	Acknowledges Reemphasizes via blackboard
{Turns briskly to class} So now we have given you several places where we use commas. We use them if you are listing things. You use them if you are writing a letter: you use them after the heading in the address. You use them after the name of the town and after the name of the province. You use them after the date.	Summarizes in detail

This lengthy transcript of the first ten or fifteen minutes of the lesson is given to point out how much of a procedural skill-development lesson is dependent on a multiple semiotic format. Over and over again, using with her voice and gestures, references to the workbook, blackboard examples, children's responses, and references to their past learning experiences, Mrs. Wayne draws the children closer and closer to an understanding of the purpose and use of commas. An analysis of any small portion of that pedagogical exchange shows how detailed and demanding the task is.

The very simplicity of the lesson is deceptive. One could say that the teacher merely follows what is given in the workbook (with or without the manual suggestions). But what cannot be replicated without a teacher's sensitivity is the patterns of semiotic linkage with what the children offer at each step of the way--whether that be a relevant and accurate example or signs of reluctance or uncertainty. This is not just a grade four lesson in the use of commas. It is a lesson taught by this teacher, with and for these children.

It is a good lesson, with all the characteristics of a good lesson. It is straight-forward and focused. It is sequential, cyclical, and relevant to the children's experiences. The children participate voluntarily and by invitation. Mrs. Wayne teacher draws on a variety of techniques for explanation and reinforcement. As the lesson progresses, more and more transfer is made from the examples in the text to the children's own contributions. Toward the end of the lesson, Mrs. Wayne playfully addresses statements to various children in the classroom and others are asked to indicate where the commas would be placed if the examples were to be written out. Her examples include: "Matthew, listen." "Danny, put your scissors away." "Jimmy, take your pencil out of your mouth." The children delight in this. This is what is happening here, in their classroom! Don is rummaging in his desk when Mrs. Wayne says: "Where would I put the comma in: "Don, are you listening?'" And they know exactly where the comma should go. The follow-up assignment requires the children to choose any six real or imaginary persons and writing a sentence addressing each and telling something interesting. Examples of their responses include:

> E.T., call home.
>
> Mom, can I have pizza with mushrooms, ham, and pineapple?
>
> Danny, can you come to my house after school? We can play on my Atari, ride bikes, or watch television.
>
> Mr. Principal, do we have to come to school on Monday, Tuesday, Wednesday, Thursday, and Fridays?

In this entire process, there is a multiple semiotic emphasis and a gradual semiotic shift in format. The lesson begins with workbook text and includes spoken, blackboard, and written examples. It moves from pre-selected examples to volunteered ones. It moves from directed patterns to creative ones. In all of this, the skill of using commas accurately is mastered. There is only the occasional error in the children's final exercise. Equally important, the lesson is a cooperative and happy one. Much is accomplished with good humour and a sense of real satisfaction. It is as good a lesson as any teacher could hope for.

However, before we leave this comma lesson, there is something important to be gained for a brief interlude within it. A discernible moment...to be found among the trees. Mrs. Wayne is asking different children to read the unpunctuated statements in the workbook and to indicate where the commas should be placed.

Nathan: {reading from the book} Plums (comma) ice-cream (comma) and jello (period)

Mrs. Wayne: That's right. Plums comma ice-cream comma and jello....Question six now, Don?

Don: {reads hesitantly with long pauses between each word} Beech...popular...butternut...oak... birch...sumac...red...maple...no, red maple.

Mrs. Wayne: Look at all the...this might cause some problems. Is "red" a tree?

Cindy: {hand waving enthusiastically} Oh! I know!

Mrs. Wayne nods at her.

It's two words! It is not like...uh?...It is not like "popcorn".

Mrs. Wayne: Right! It's like ice-cream. You do not put a comma between ice and cream. You won't put a comma between red and maple. Because it is a "red maple".

Tony: Well, how would you decide that anyway?

Well, there would be a comma between sumac and birch but you wouldn't put one between red and maple. It is "sumac" comma "red maple".

"How do you decide that anyway?"...Tony's question is not answered by Mrs. Wayne--at least not explicitly. His confusion seems to arise from not knowing that sumac is a different tree from the red maple, not unexpected for a prairie child who does not see a sumac growing here nor ever hear it referred to. For Tony, it may have been perfectly logical for a tree to be called the "sumac red maple." This is clarified for him. Not so much by what the teacher said about differentiating between the trees conceptually but rather by the inflection of her voice as she spoke. The words were articulated as separate entities. "Sumac" is spoken not as an adjective or indicator of a species of red maple but as a singular class of tree.

Here, the main semiotic clue for Tony is in how the teacher said that words. He nods his understanding and the lesson continues. His nod is a return confirmation to Mrs. Wayne that he has understood. In the space of a few words and very little time, the semiotic exchange is complete. What is important however in the total pedagogical exchange of this lesson is that not all children are like Tony. Most are silent as blurred understandings accumulate. Most do not ask for clarification; most assume that the teacher will continue the lesson and continue she does. Most accept this recurring (and ideally temporary) confusion about what the teacher is saying as a natural state for them to be in. Where the teacher's acuity and sensitivity does not spot such indistinct understanding, the children continue in a hazy realm of fragmented meaning.

If they learn (or more correctly) are taught to accept this as the proper and expected state, they will not question what is taught nor what is meant by it. They will assume a pedagogical state of ambiguity, and unquestioningly rely on the teacher's word. Would there were more outspoken soft-spoken Tonys, for his sake and for the sake of all his classmates who do not question, either because they are so accustomed to ambiguity or because they will not bring themselves to ask. In some classrooms, it may be that very early in the relationship teachers make it implicitly clear that they will not gracefully tolerate such inquiry. Tacitly and in their own defence, children accept that they are never expected to fully understand what is taught in their classrooms. If children's acceptance of habitual ambiguity is common, it is indeed a sad commentary, for then they are caught in the expectation of structure and sequence without a sense of the priority of meaning.

While this incident between Tony and the teacher is only of momentary duration, there are important implications to be derived from it. First, teachers must be alert to the semiotics of children: the signs that tell them that the children understand (or do not understand) what is being explained. These signs may be very subtle and as such can not always be expected to be detected in large group situations such as a total class lesson. This highlights the importance of teachers paying particular attention to children when they are participating in a one-to-one relationship with them or in small groups. These circumstances may offer the best avenues to a fuller appreciation of the surety and accuracy of the child's understanding.

Second, teachers should create within their classrooms the kind of atmosphere and encouragement that draws children out verbally to raise questions without embarrassment or fear of censure. Just asking, "Does everyone understand?..." does not serve the purpose. This inquiry has long since taken on the connotation of a polite pause to which no answer is expected. Further, if the matter is not clearly understood, making a public declaration of a personal uncertainty or admitting total ignorance is rarely easy. It is more likely that eyes look down and hands become occupied with whatever is available.

The teacher's responsibility must go further. Through an awareness of the meaning of the children's nonverbal behavior, their hestitancy, their fragmentary and struggling expression, and the vague inaccuracies of their discussions, the teacher can detect where knowledge is incomplete. However, there is a common illusion underlying this: that all knowledge is easily, readily, and fully understood by everyone. This is not so. But in his few words, Tony does tell us that there are moments that can be salvaged from confusion if the teacher is aware of and sensitive to the multiple masks of uncertainty. There is much in the procedural semiotics of this comma lesson that suggest subtle procedural precautions that teacher might take to assure maximum understanding.

Haiku Writing: An Analogy of A Semiotic of Differences Between Children

In contrast to the lesson on comma usage, two episodes from a series of lessons on haiku writing are presented. A motivational activity associated with these lessons has been described in "Lessons Outside the Classroom" (infra:217). Samples of the children's haiku writing are also included there.

Haiku writing has been a very popular school activity for many years. Its seemingly simple structure suggests that it is possible for young children to master the haiku form. Rarely, however, can they match the sophistication of the classical haiku symbolism with its references to nature and the seasons or its subtle turn of phrase, juxtaposing of ideas, and implicit meaning. Nonetheless, haiku attracts teachers as a form of poetry that draws children away from the static rhyming patterns the children commonly associate with poetry writing. Teachers do stress the inclusion of nature in the children's writing. In turn, these images lend themselves to attractive illustrations to accompany the haiku. There is often an aura of pride and satisfaction when these poems are displayed, or published in the school newsletter or year-end school magazine.

The interpretation of the haiku lessons given here is based entirely on my observation and extrapolation. Whereas transcripts from audiotape and video clips of the comma lesson were critical to its discussion, they were not used as semiotic tools of analysis for the interpretation of the haiku lessons. Nor would they have been appropriate, for in this lesson much of what occurs is in the child's mind as he creates his haiku. What is presented is more a researcher's impressionist interpretation of the teacher's use of a film on the structure of haiku and of a time when the children were creating their own haiku.

The Haiku Film Experience

On a sunny October afternoon, an exceptionally beautiful film is being shown to the grade four children. Mrs. Wayne has chosen the film Haiku as a supplement to the experiences she has been exploring with the children while listening to and creating haiku. The film opens with magnificent scenes of nature: ocean spray, sunlight through trees, closeups of seahorses, dewy buds, and butterfly wings. The sound of a bamboo flute softly accompanies these scenes.

Strangely, the children take a long time to settle down. One must wonder about this. Are they so conditioned by television commercials that they need a preparatory time even though the film has started? Is this telling us that they need a sign-system warm-up or semiotic incidents as an interlude between the task of watching the film and the giving of full attention to it? Or, while they may like the oriental music, are they are waiting for verbal clues to come from the film--words, any words--words that govern their lives so extensively? But there is no narrator's voice, not yet. Gradually they become quiet but Adele cannot resist asking, "Why is there no one talking?". In reply, Mrs. Wayne merely shakes her head and nods Adele's attention to the screen.

The scenes and the music continue. Then, an Japanese-American woman's voice speaks haiku in accompaniment to the changing world on the screen.

The bud of first spring
opened and reached for the sun
Her eyes spelled "hello"

The children do not move. Their eyes are held to the screen. The music fills their ears. Now oriental drums and xylophones join the flute. The soft voice speaks another haiku, and then another, and another. And so it continues. By now, each child has found a space and place for his body so that it is at peace. Quietly, the film ends. As if in a game of statues, the children continue to sit motionless. Many have laid their heads on their arms stretched across their desk. Some lean on their elbows toward the screen. One has curled up close, with his feet on his chair. His arms encircle his knees. His cheek rests on them. For as long as it had taken the children to become still, it takes as long for them to leave the tranquillity of scenes, music, and words. The film has ended but they pull themselves very slowly back into the classroom world. Even the teacher returns to her role with reluctance.

*

As I shared that experience with them and as I think about it now, it seems that the film carried Mrs. Wayne and the children into a multiple sign world. There, many beautiful and harmonious symbols became interwoven into a meaning that cannot be articulated but one that lived (at least for that brief time) in the feelings and thoughts of those who watched. I could not read their faces except to know it was a rich experience for them, one that had little to do with the traditional metric measures or themes of haiku and had a great deal more to do with the journey each child took all on his own. The journey began because of the tantalizing invitation of the visual images and the languid sounds of the voice and flute...but it did not end there. Only those who watched the film and lived the experience as the children did might begin to know where it led them.

The Time of Writing

A day later, Mrs. Wayne is reading from a collection of haiku written by former students. She treasures the booklet she holds and adds to it each year as children voluntarily make an extra copy of their haiku for her. As she reads, the children listen very quietly. These are poems written by children, children they may know, for Mrs. Wayne gives the name of each poet: "This one is by Jennifer, Nancy's sister. Some of you know her....", or "Eric wrote this one. He won the track meet last year. The tall boy with dark curly hair....", or "Cynthia wrote this one. She helped a lot in the library last year, so I think most of you know her." And heads nod or special glances are exchanged. These poems are from their own world and not from the world of the ancient masters--Basho (1644-1694), Buson (1715-1783), Issa (1763-1827) or Shiki (1867-1902)--as cited in Akmakjian (1979). Nor are they from library books, although Mrs. Wayne has read from these too. These are haiku by children..."Like me. If they can write haiku, maybe I can too."

After a quick review of the five-seven-five syllable pattern of the traditional haiku, the children are encouraged to write their own poems following this classical style. The room is soon filled with children chanting their first five-syllable lines and softly clapping their hands to verify the meter they have created. A few children clap more quickly or say their words more quickly to force them into the measure. Much to their delight, a few children create the right number of syllables in meaningful phrases. Another child frowns and jumbles words to make a measure of five beats. There is not much sense in it. But most of the children have absorbed the rhythm from the film and from their teacher's reading and, with a little effort, create a haiku that pleases them. Sitting at the back of the room, I watch and listen. It is as if I am watching flocks of doves cooing--each with a different inflection but following a predestined rhythm.

This leads to the thought that much of what children do in the classroom must follow a beat of predestined rhythm. Teachers set the topic and the manner in which it is taught, reviewed, or incorporated into the ongoing curriculum. Teachers determine the scope within which each child should function, not unlike the five-seven-five syllable structure mistakenly thought to be required of haiku. But as Akmakjian points out, a strict syllable count is the least important part of a haiku (ibid.:35). In the same way, conformity may well be the least important part of pedagogy. Too frequently in the classroom each child must suppress his own rhythm to a rhythm created by the work before him, by the explicit and implicit instructions of the teacher, and by the contingencies of his own being-in-the-classroom on that particular day.

As with haiku creation, the rhythm of each particular child on a particular day may come naturally, spontaneously. On the other hand, it may be forced and unnatural, an unhappy compromise between what the child is and wants to be and what the teacher commands he be and do. As a haiku ineptly created, pedagogical rhythm for that child becomes stilted and artificial. Some children are able to adapt, to clap more quickly (as it were), to squeeze a little more from themselves than they might more willingly give another time. No matter how they struggle, other children cannot meet the teacher's intentions for that time and place. Still others, as a flawed haiku, are best left aside for the time. There is no salvaging that honours their integrity and their need for a personal, unmatched, and unmatching rhythm. For today, they are perhaps best left as a haiku that cannot be written... as children rather than poets.

small children in school
learn well if pedagogy
echoes their growing

Media in the Elementary Classroom: Extended Semiotic Horizons

The use of multi-media approaches in pedagogy is not new. A mother with her new infant begins the process. She choses from the world those objects that are likely to carry meaning for her child or objects which she thinks should carry meaning for him. She names and touches and shows and moves and sings and hides and hugs. She is, herself, one of the objects outside the child to which a word (a meaning) is given. Later, in his own play, the child makes mounds of garden dirt and scoops them into his toy truck and knows it to be gravel. He may or may not yet have a name for what he has created but he has used something in his world to stand for something else in a world he creates in his mind. The child's first book is also a sign; his initial mastery of reading--a semiotic triumph. His teacher, too, uses films, filmstrips, video cassettes, records, overhead transparencies, or even the chalk on the blackboard ledge, to reach beyond what can be conveyed by words alone, to create a sign that standing for something else.

We are so familiar with the term "media" that to look for it in the dictionary seems unnecessary. We know. So it is a surprise to find there only: alternative plural of "medium".

Surely, there should be "satellite communications", "video audio disks", "lasers", "holographs", or "voice-activiated typewriters". Even granting the time lapse between the publishing of a dictionary and the explosion of contemporary computer-affiliated inventions, should not "radio", "films", "gestetner" and "xerox", and "taperecorders" and "videotapes" be found somewhere in the description. There is, however, a wisdom is not formulating definitions that are time-specific. Who is to know what tomorrow's medium will be?

To "medium" then: from the Latin medius, meaning middle. Film, then, may be considered as standing between man and the world and mediating between them. It is also "an intervening substance in which something may act or an effect be produced; a means or agency; an area or form of artistic expression, or the materials used". Much has been written on the semiotics of film: Eisenstein (1942,1975), Lotman (1976), Metz (1976,1984)), Wollen (1972), and Worth and Gross (1981), to name but a few. There is an ongoing argument whether or not there is a language of film that parallel the codification of human speech (infra:692). That argument is important but distant from the use of media in the classroom. Rather, the understanding of a "medium" as a surrounding or enveloping element, an environment, is of greater relevance to pedagogy as a semiotic process.

From all the multi-media available to teachers, I have selected two very simple and very commonplace: an overhead transparency, and a recording. The description of the pre-Hallowe'en creative writing lesson below attempts to illustrate how the use of these two objects can create a surrounding environment that is different and valuable in the pedagogical process. The classroom is changed by the drawing of the heavy navy curtains, the use of an overhead transparency of a haunted house, and by the eerie sounds coming from the record-player. The atmosphere is changed mysteriously from a comfortable and familiar one into a tantalizingly frightening one.

> Mrs. Wayne: (referring to the transparency of a haunted house showing on the screen at the front of the room). Tony? What can you tell me about that house?
>
> > Tony: It looks haunted and on this side is looks like there might be a graveyard in the back.
>
> Don, tell us something about it. {continues to invite comments from the children throughout}
>
> > Don: It's like a mansion. Something like a little castle. And it looks like it could be haunted.
> >
> > Kathy: I think it's haunted. It looks really haunted. It doesn't have any curtains. It looks like nobody's lived in there for a long time.
> >
> > Lindsey: It looks like it has lots of cracks in it. Well, the gate is open and if somebody lived there, the gate would be closed. And the grass is almost like hay.
> >
> > Danny: It looks abandoned...if you look at the background and everything.

> Lisa: The sky looks spooky too.
>
> Don: Haunted houses are usually big like that. And they look like that. It's just more appropriate when they look like that.
>
> Lindsey: When you look at it, you look at it "haunted"!

The children are "reading" the picture (which is indeed stereotypical of a haunted house), and picking up details that support their interpretation. Interestingly, Don draws their attention to the size of the house as being typical of haunted houses, as "more appropriate". Lindsey adds her impression: the totality of the picture inevitably suggests "hauntedness". No other interpretation _is_ possible. Indeed, one would be hard pressed to interpret the picture in any other way. It is sign-saturated. This is both an advantage in that it sets the context in which the children will be writing their own stories, and a disadvantage in that it presets that context to include all the stereotypical signs and folklore about haunted houses. It may be too semiotically- closed.

> Cindy: It's fall because there is no leaves on the tree.
>
> Danny: If you look at the back, at the window, there is a ghost there.
>
> Mrs. Wayne: I want you to close your eyes for a minute... {speaks softly} Close your eyes... {knocks on a desk and in a spooky voice} You are at the door... Take the handle and open the door.
>
> Chorus: (Squeaks and door groans)

You'll hear those sounds in your mind... I want you to walk in... You are walking across the floor....

I am going to put a record on for background sound...and that is the only noise we will have. I am sure you have lots of ideas now about the stories you would like to write. Listen a little, then begin.

Various children comment:
Whooo!
I'm scared!
I need my friends!
Whooo!

Whoo!
(louder) Whoo!)
Sh! Sh!
Whoo!
Nnnnn-yaooh!

[Record begins with "haunting sounds"...i.e., wind moaning through the boards of the house...]

What was that!?
(giggling)
{shoulders hunching and pretended fear}

[Record: shrill wind now...joined by what sounds like a chorus of ghosts complaining....winter blizzard wind now...continues...wailing of ghosts?...Sounds continue...sea storm?...]

Jimmy: (in scarey-sounding voice) Wow!

[Record: Storm...wind...reaches pitch and subside gradually. Sound of angry or frightened cats... "ooo" of ghosts....Dogs barking as if in a chase... whining dogs...stormy wind...waves crashing on rocks...]

[Mrs Wayne goes from one desk to another, reading what children have written to this point and occasionally offering suggestions.]

***

Cindy comes to the table where I have my taperecorder, and offers to read her story. I accepts happily and turn the microphone toward her.

> Cindy: {reading from her scribbler} When I had entered I was shivery and scared. I walked in a little closer. I saw something. It was a half-ghost. It disappeared and I walked a little closer. I saw it and I screamed. It was a body half-part. I ran to the door. A witch was there. I saw her magic wand at the door. It had locked it. I ran for the steps. And I went up the stairs. I opened the door and I jumped the cliff. I was up high!

[How did you feel about writing this story?]

> (sheepish giggle) Scared!

[Were you scared when you were writing it?]

> Yeah. Well, all the sounds...[on the record] and especially the thunder when it went really loudly!

The sound of the record playing creates a "real" experience for the children. It is an experience of the moment: they are listening to the record. But it is also an experience of the mind. But more, it is a real experience lived within the haunted house pictured on the overhead transparency. Following along the avenue of the semiotics of the sound effects, the children become transformed from children sitting and writing in the classroom to children experiencing themselves as they walk through the reality of that portrayed house.

> [Tell me, Bonnie: You have GHOST written many, many lines higher in comparison with the rest. Why did you do it that way?]
>
> > (timid laugh) Because I was scared of something.....I don't know. (giggles)
>
> [But you really wanted your writing to show that?]
>
> > Yeah.

The real of the classroom blurs with the real of the imagination. The children feel the experience: as they write they are scared...not of writing...but of writing about what happens to them within the context of the haunted house. It seems as if they are simultaneously in the haunted house, and watching themselves there...and writing about that experience. This multi-layering of thoughts creates a memorable experience for them both as writers and as children influenced by the sounds coming from the record.

> [Do you think it was a good idea of Mrs. Wayne's to show you the overhead transparency before you wrote your stories?]
>
> > Cindy: Yeah!
>
> [Do you think you wrote a better story this way than if she had just said "Let's write a spooky story."?]
>
> > I don't know.

This is an interesting comment. I had expected Cindy to say "Yes." I had expected her in some way to confirm that she did write more effectively because of the way in which Mrs.

Wayne had presented the motivation. Does Cindy believe that she would write equally well without a saturation of sensory stimuli, or is she is just being candid? I do not know. But she does bring me back to the fine line of truth--the line over which (as a researcher) I must not step without her confirmation. I explore a little further, and as I do a number of others join us.

[Did the picture help?]

Cindy: Yeah! That helped a lot!

[Does your story take place in that house?]

Well, when I got caught? No, I was outside.

[Okay. Thanks, Cindy. Here's Bonnie. What did you think of having that record on?]

Bonnie: It was sort of...fun.

[Did it help you write?]

Mm. Just to give me ideas about stuff.

[Nancy, would you agree with that?]

Nancy: Yeah, like sometimes if Mrs. Wayne says, "Write a spooky story....You might not think: What did it sound like? What did it look like? But when you have the record on and it's raining and sometimes it has black cats...then you think of black cats and you might not think of black cats if it wasn't on.

[Do you think you could write a spooky story without that?]

Yeah, but not as good.

These comments suggest that, while external media stimuli may not essential, they do assist the creative process. However, the effect of entire experience seems to be long-lasting. In May, some seven months later, I had an interview with Carmen. This is what she remembers of that October lesson.

> [When I was here earlier, Mrs.Wayne used a lot of films, television programs, and listening cassettes, the overhead, and so on. Do you like it when she does that?]
>
> > Carmen: Yeah! I like to see the things that she draws and I like to see the pictures to go along with what she is saying.
>
> [I wonder if you remember? I think it was Hallowe'en and she had a picture of the haunted house on the screen. She was playing the record with spooky music. Then she turned down the lights and closed the curtains. It was kind of a spooky atmosphere. Does that help you write a story?]
>
> > Yeah, sometimes. Because the picture describes what the place might look like and also it describes what it might be like inside the house and around the other part of the neighborhood that the house is in.
>
> [Do you have to write exactly what you see?]
>
> > No. Except, maybe if there is a brown fence and most of the paint is falling off, I might think that a cat's been walking along there a lot and it's scratching itself against the fence.
>
> [I see. So a little hint gets your mind going in its own direction?]
>
> > Yeah. And sometimes...maybe it likes to rain in that place.
>
> [Hm? All from that little chip of paint? All those ideas start coming...!]
>
> > {giggles} Yeah!

Carmen's conversation about the effectiveness of the media the teacher uses also points out how very little of a totality of signs may attract the child. For Carmen, this was the chipped paint on the fence. For others, it was the worn steps or the broken window. From a single sign, they created an extension of meaning that they call their story.

> [Bonnie, why do you want to read your story? You are practically shaking your paper, you want to read so much.]
>
> Bonnie: I thought you might be interested in it.
>
> The Haunted House
>
> by Bonnie
>
> One day I was walking home after school and someone or something called my name...by the old house. So I walked up to it and opened the door s-low-l-y. I walked in and never shut the door behind me, just in case I had to run or something.
>
> I heard footsteps coming closer and closer. I scared. I thought, "Oh my gosh! Oh no! Oh no!"...It was a chubby old lady, so I turned around and about to run. I thought, "Oh no! Why did I come into this old spooky house?" Anyway, I started to cry. But when I turned around to see if the old lady was still there, but she wasn't. So I got up and ran to the door. But when I got there, the door swung shut. I started banging on the door and yelling, "Help!" at the same time...just in case someone outside heard me. But no one did.
>
> And when I heard the cats squealing and the dog barking, then a ghost...Oh no! It had to be my imagination. It has to be. But it wasn't! So I started to scream. Oh no! I don't even know what to say, I am so scared!...

> And then someone was knocking at the door. It opened and it was my dad. I ran as fast as I could to him. "I'm safe!" I screamed! "Oh, dad! I love you!"...(shy laugh)...

The End

While Bonnie was writing her story and while she was reading it to me, she was deeply involved in semiosis. As she wrote, she created an experience on paper with signs, the letters of the alphabet. These signs were motivated by signs suggested to her from the transparency and the sound-effects record. As Bonnie looked at and listened to those signs, she simultaneously recreated herself as if she were living that experience. As she read her story aloud, she recreated it for me and we both relived it imaginatively, parallel to the sound of her voice. Bonnie gave signs to me that I understood as signifying what she wanted to express from the signs that had been her experience only a short time before. Yet who is to say from where Bonnie drew her initial designatum or where the final interpretant should fall? With an analysis of her story? Of her creativity? Of her relief in finding her father and being "rescued"? Her linguistic maturity in comparison with other children's? We have only some of the semiotic links of Bonnie's experience and from these only some of the traces can be interpreted.

What is important is the pedagogical role that the teacher assumes in creating this semiotic experience for the children. A teacher's choice of motivating or supporting material may be critical in initiating ideas in the children's minds. The multiple sign-saturation in this lesson provides a broad field of sensory impressions to which the children might respond and from which they might receive inspiration for their own "spooky" stories. A reading of their finished stories shows that the transparency of the haunted mansion was indeed pivotal. Its image became the setting for many (although not all) of the stories. If the place of their stories was not derived from the picture of the mansion, the atmosphere certainly was.

The children's stories were filled with the sounds of suspense and fear: the creaking stairs, the silence of something unseen, a quick intake of breath and the stilling of it, in case someone (who?!) heard. The wind howled, shutters banged, and bats and owls whirred through the air. Some of these images come from the picture itself; others from the discussion of it that preceded their writing. Still others were derived directly from the recorded sound effects. Many of the sound impressions included in the children's stories seemed to motivate their stories and form its the inner network.

As important as the sounds were in providing the atmosphere which permeates the stories, the children appeared to derive their story plot from the visual cues of the overhead transparency. If Carmen's comments are typical of others' responses, the visual-cues set the story-line while the sound cues enhanced it.

The stories show that the semiotic cycle is complete: the children see and hear the signs of mystery and write their stories with these or similar ideas. The signs the teacher presents to them move the children into realms of thought where these signs give rise to other signs. While the signs on the overhead of the abandoned mansion and from the record playing in the corner of the room are indeterminate, the signs the children create are linked by a sense of plot and characterization. As the children's stories are read, the words recreate images for the listener, images that take up the spirit of the original picture.

The power of the signs presented to the children is compelling. It is evident in their first-person involvement in their stories. Although there had been no suggestion that this was necessary, each child was the main character in his or her story. Nor, as had happened in other writing sessions, did any child have difficulty writing a story. Perhaps the spontaneous identification with the mansion picture, projected as large as possible on the screen, literallyfunctions as a sign to draw the children into the mansion. They willing go and (as themselves) become their own characters living in the world of their own stories. Not surprisingly, some of their friends live there too. They are icons of themselves in this fictionalized but experientially-rooted story. As Bonnie said, explaining the super-large "GHOST" on her paper..."Because I was scared of something...I don't know?" Perhaps she was not only scared of the atmosphere created in the classroom but also of this strange experience of writing and living in two worlds at the same moment and of shifting from one reality to another without really understanding how.

The example of this single lesson supports the tenet that the use of a broad spectrum of media in the classroom can stretch semiotic horizons for the teacher and the children. While in themselves they may be considered closed semiotic forms--framed, packaged, and permanent--they have the magical potential to open endless worlds. They provide the specific detail and global concepts that children need to understand their own world and to explore beyond. In all their forms and variations, media present a rich treasury for pedagogical extension. If one transparency and one record can be so enriching, how much more are the vast resources available to all teachers?

The Science Lesson: The Semiotics of Delay

In many schools, teachers shared their expertise in a particular subject area by taking other classes in exchange for another's speciality. A grade two teacher, highly competent in music, may teach several classes of music at that grade level or wherever an appropriate exchange can be timetabled. Mrs. Wayne worked under such an arrangement, trading math classes with a science teacher. Since my primary interest was with the grade four class, I remained in their classroom during that time. On many occasions, very effective science lessons were taught. In particular, a lesson on the disposal of urban garbage (ranging from household to industrial waste) was highly informative and thought-provoking.

The lesson described here was not of this nature. It is, virtually, the lesson that almost wasn't. We have all taught this type of lesson--when things just didn't happen as we had planned or expected. However, in analyzing this particular lesson, we come to understand at least some of the pitfalls that await teachers and children alike. It should be clear that the interpretation does not infer that all science lessons are foredoomed nor that this particular teacher is not skilled. She is. What is described here could happen in any classroom, in any subject, with any teacher.

There are three main sections to the discussion: the preparatory period, the group activity, and the summation of the lesson. Excerpts from each will be given from transcripts, followed by a semiotically-based interpretation of what occurred. The format is somewhat different from previous lessons in that headings are inserted to point to the meaning I have given to various aspects of the lesson. These were inserted following transcription and are not intended to represent the teacher's intentions nor observations during the time of the lesson. These headings are an outsider's reading, after the fact.

The Transition From Homeroom Teacher to the Science Teacher

It is late January. Opening exercises and the taking of attendance have just been completed. Mrs. Wayne is at her desk, gathering the materials she needs for her next math class with the grade sixes down the hall. The children are at ease, talking with one another, moving about the room, filling in time until Mrs. Roland arrives to teach their science lesson. The noise level perceptively increases but Mrs. Wayne says nothing to the children. Several children come to her desk. She waves them away and hurriedly leaves the classroom. The noise increases. A couple of boys are feigning like boxers at the front of the room.

Mrs. Roland is at the door about to come in when another teacher stops her. They talk briefly and then Mrs. Roland makes her way to the front of the room. She talks informally with several children along the way. Most children notice that Mrs. Roland is in the room but continue with their own activities. There is no change in the considerable volume of noise.

Mrs. Roland comes to the front of the class but for some time continues to talk with individual children. Then she sets down her books and addresses the class in a loud voice.

The Lesson Begins

Mrs. Roland: Okay. Now. I did not...
Oh,oh..{referring to Mrs. Wayne who has hurried back to her desk for something}...
{continuing addressing the class, who are still very noisy}...
I did not manage...
{stops, pointing to the pile of math tests on the top of the filing cabinet and addressing Mrs. Wayne}...Don't forget those!...
{readdressing the children}...pieces made for those of you who are missing some. What I want everyone to do right now...because we need to have some full sets for today...Will everyone put their sets out on their desks and we will see whether or not you have a full set?

[Noise immediately increasing as children rummage in their desks]... {speaking louder}....Take everything else off your desk. Put yours out and make sure that right now, as of this moment...you do or you don't have a whole set. You must have two large triangles and two small triangles. Two large squares and two small squares. Two large rectangles and two small rectangles. You should have twelve things altogether.

Nathan: Got it!

Good....Sort them out so you can...Heh, whoa! {referring to the noise level}...Tony has done this well. He has put them side by side on his desk so he knows he has two of those and two big squares and two rectangles, etc. Now if there happens to be...

Listening!...One person is missing one small red triangle...I have it right here... {hands it to Adele nearby}...Do you have the smaller red one? {to the class} Come on, get those sorted out. Okay, I don't...[talking has continued without stopping since she began]. Boys and girls, I cannot help you today... {to Ian} You've got three? They're probably from another set then....We'll see if we can put them together.

> Matthew: {shouts out to someone bothering him}."Get out of here!

Mrs.Roland: Very shortly, I am going to have to get very angry. [No change in the noise volume]... {softer tone} Don, will you sit down quietly in your desk, please?...

> Roxanne: Sh-sh-sh!

Mrs. Roland: {standing at his desk} Jimmy, it looks like you've got...no?...Yes, you will need a couple of these guys [pieces]...These two are okay.

{to Rob} You make it very tough to do anything when you behave like that.

Now, Marie, I don't see yours out on your desk. How do you know if you have a full set?

> Marie: I have a whole set.
>
> Let me see. {checks}

Reiteration of Teacher's Lack of Preparation for Lesson

{to class} I know I cannot do anything about stuff that people are missing today. Now...sh!...would you put them back in the envelope and on the outside of the envelope, would you write:..."Full" if nothing is missing. Or "Missing" if they are not all there. Then I will know what I have to make.

{to Cheryl} That one is not really very good {piece worn}. I'll make a new one. That will help.

{to class} Okay.... {to Lisa}...Well, I put it on your desk. I put an envelope right there on your desk... {to class} All right now...those of you that have full sets...Sh-sh!...We are going to try to do this game today, if we ever get around to it! Would you please...Listening?..Those with full sets, stand beside your desk with your envelope in your hand. Don't drop anything out. {Someone giggles}....

Teacher's Frustration Comes To the Fore

{annoyed now} Boys and girls! We are trying...I am trying...hard to organize this. Jimmy and Brian! You will not play!...{very long pause as children stop talking and look at her}...Now, it is tough enough to do this with you folks when we don't have our full sets...so I would like to do this as quickly as possible this way.

{resumes procedural tone} Okay! Nathan, will you join this group up here? Nancy, will you join this one? Cheryl, will you join Danny and Kathy and crew over there?... [children movement and noise increases steadily as she continues distributing children into groups around the room]...Rob, come up here with these people... [noise predominant in room, teacher literally shouting to various people to indicate which group they are to join.]

{at the top of her voice} All right! Ladies and gentlemen! Boys and girls!... Only full sets will be used. [talking continues]...

It is clearly evident that the lesson is not off to an auspicious beginning. Some ten minutes or more have passed and "order" is tenuous at best. If we look at the context of the lesson to this point, a number of possible explanations arise. The points to be made are numbered--a format that emphasizes their importance.

1. In her legitimate concern to prepare for her next lesson, Mrs. Wayne abruptly cuts off her relationships with her own class even though she is (for a brief time) still physically present. Mrs. Roland has not yet arrived. The children are without a teacher-relationship in that interlude. They do as they please. Their "pupil" designation has been removed from them by the homeroom teacher and is not yet reinstated by their science teacher. In the classroom, they are adrift and enjoying it.

2. Once Mrs. Roland comes into the room, she takes her leisure at assuming control of the class. The children continue as they are. From a semiotic point of view, the children could not receive a clearer signifier from the teacher nor a clearer signified message. The teacher is not on-task: why should the children assume that they must be? If the teacher is having casual conversations, why can not they? If the teacher is not fully prepared, the intervals of looking for materials, preparing blackboard charts etc, is seen by the children as the teacher's time and not as time that concerns them. Mrs. Roland's casual manner instantly tells them that the lesson is not about to begin. It tells them that the span of time until she is ready is available to them for their own purposes. What else can they do? When they choose to talk, to read their own books, to doodle or do mazes, they are in turn indicating to the teacher that they have a natural inclination (at least as judged from their

point of view) to use time in some constructive way. Ironically, Mrs. Roland who now faces continuous chatter throughout the lesson created the flaw initially.

3. Another inadvertent confusion is evident. It is difficult to read the transcript but (in many ways) it is indicative of the difficulty the children must have in listening to Mrs. Roland. At one moment, she is addressing the class as a whole but only a few words into her comments, she shifts her attention and her comments to an individual child. These asides occur frequently and hold the class in suspension between the statements addressed to them and those that are not. This fragmentation is difficult to follow and one can appreciate that the children may unconsciously decide to continue their own focus. This in turn provokes the teacher into calling (and recalling) individual children to attention. The pattern becomes habitual and self-defeating. Both teacher and class fall victim to it.

4. In this science lesson, the situation is further negated by the teacher admitting that she has not had time to prepare properly for the lesson and that she wants the children to check the materials (scrambled from past usage) in their resource envelopes. The science lesson further disintegrates as a purposeful and meaningful experience for the children. It becomes an experience in frustration over the missing pieces and the children's and the teacher's

inability to deal with the problem with any expediency. For some of the children, it is extremely problematic to understand the type of items the teacher is describing (no small challenge when the piece is missing from the collection. How do you easily find what is not there?). Other children have a different dilemma. Nathan had verified his set of shapes almost immediately after Mrs. Roland had requested it. He must be witness to all the subsequent confusion. Nathan and others like him are not having a significant pedagogical experience during all this time. In the meantime, Marie suffers from Mrs. Roland's innuendoes that she hadn't checked her set. She too waits, hurt and impatient.

5. During this interval, without much success and with varying degrees of intensity, Mrs. Roland reprimands both individuals and the class as a whole. Her remarks range from rather implicit disapproval to open criticism. In addition to the negative atmosphere that this creates, there is an inordinate amount of time lost from pedagogical activity. Listening to the audiotape of the lesson gives an prolonged illustration of the time lost (by both teachers) and the negative atmosphere in which the lesson finally begins. One might speculate that the fault lies in the very first few moments of the children's experience as Mrs. Wayne leaves and Mrs. Roland enters. When Mrs. Roland does not begin a purposeful pedagogical exchange with the children, there is

no real definition of the subsequent activity other than "busy work". While the judgment may be seem harsh, no less than one third of this lesson is wrapped in this confusion. While one can appreciate that teachers must frequently function on the priniciple of solving-problems-as-you-go, the trade-off in lost purposeful experiences is not sufficiently justified. According to Key (1982), 56% of classroom time can be identified as spent on procedural matters: simply getting ready to learn. When the entire science lesson is considered, it would appear that the loss in the whole of this particular lesson could be significantly higher. To state the reverse: pedagogical time would be less than forty percent even before any assessment of the quality of that time is made.

6. The next point is subtle and not often recognized. Yet it is critical. What is the science lesson about? To this point in the lesson, its specific objective has not been defined for the children and it never is. As can happen in any school, the previous science lesson had been cancelled because the children were involved in another activity, a dental hygiene project. The lesson before that, a free-standing lesson unrelated to the current unit, had been taught by a substitute teacher. It has been almost two weeks since Mrs. Roland last dealt with the concept of "properties" of objects: their size, shape, and color. Yet no reference is made to this to set the context of the children's thinking and activities. The children were divided into groups and

simply told to use their sets of geometric shapes in a game:

> Mrs. Roland: Spread out all your pieces [three sets, each a different color]. Once you have them all out and have a chance to look at them, one of you is going to take one of the pieces away and everybody else has to try and guess which one he took away. So you get to look and see what is there first...then somebody takes one away when you are not looking and you have to guess which one it is.

I wanted to check what the children had gained from the lesson. When Cindy passes close by, I ask her what they have been doing in the lesson. She gives me a wry look, as if to say, "Don't you know?!" but she does explain:

> Cindy: First we checked each color to be sure we had a whole set. And then we emptied each envelope where that was okay. And somebody has to pick up one and the other persons that aren't picking up get to hold their eyes and the person that's picking up got to hide it somewhere and then they got to guess what is missing.
>
> [Why do you play that kind of game? What did you learn from it?]
>
> Well...hmm...objects. Objects...and objects that you remember. Um...um...
>
> [I think Mrs. Roland used the word "properties" a while ago.]
>
> Yeah. Color...and size...and shape. You see how well you can remember what is missing and that.
>
> [Is that a good exercise for kids?]
>
> Well...just to see how good their memory is.
>
> [Do you need a good memory to be a good student?]

> Yeah! If you do multiplication and you forgot nine times six and you kept guessing and guessing but you can't get the right answer.

[Good example. Any other times when kids need memory?]

> What time they come home and that.

[Right. How about in school?]

> Who teaches us the next class. And you will know what books and things to get out.

[Right. Do you have to use your memory when you are reading?]

> Yup!...You've got to remember a word that is part of it. If you get that part, you can get the rest of the word. If it's like "properties", then we have to remember that word. So that if we read that in a different class, we will remember it.

The important point is that Cindy makes the rationalization of the lesson and its application to her own life without any direction from Mrs. Roland during the lesson. That she can do this does not ensure that other children can or even that Cindy would have summarized the experience in this way without being asked specifically to do so. As many teachers do, in this lesson Mrs. Roland assumed that her pedagogical intentions were clear. At no point did she explicitly set the purpose of the lesson before the children. However, the lesson concluded with considerable success and this will be discussed separately. The point to be stressed here is that the journey through the experience might have been much more purposeful if the reason for or the intent of the journey had been made clearer from the outset.

6. Last, but perhaps most importantly: The fact that Mrs. Roland does not begin the lesson with full authority and in full readiness may also be a sign to the children that she does not respect them enough nor value them enough to be ready for the experience she is to create for them. Semiotically, the delay is more than a loss of time; it may be a loss of image and self-esteem, a loss the children must then repair. They do this by talking to each other or by engaging in individual activities that reaffirm their own value and integrity. Is this reading too much into the issue? I think not. The messages that a teacher sends verbally and nonverbally (gesturally, and in her intonations, pace, and content) do set the context from which the children draw their own place within the classroom. If they are excluded by actions and attitudes of the teacher, why should they give their attention to such negation? Are they not wiser to turn to their own activities?

In ancient deference to the ineptness of others, many peoples lower their eyes. They do this so that the person they have implicitly measured cannot see in their eyes their disappointment, embarrassment, or dismay, or so that they themselves need not look upon that which is not appropriate. Are children at such moments looking away from the teacher, into themselves? Do teachers realize that this is occurring? What should they do to reinstate their pedagogical accountability with the children? How teachers avoid these situations is an invaluable lesson. How they remedy the fault once it has occurred is also revealing. By looking at the episode of the science lesson, a delayed-science-lesson, we can see the creation of such a situation. By comparing it with a lesson such as the haiku lesson (which may be called a flowing lesson), we may understand how the non-lesson can be prevented. The signs are our clue.

Group Activity Centred on the Geometric Shapes

The next phase of the lesson involves the children using the envelopes of geometric shapes in the game described by the teacher. It is here that the children come to participate in a learning experience. One aspect of that experience is resolving individual differences in the process of playing the game in small groups. A full analysis is not given. Rather, an excerpt is presented as indicative of the children's involvement at this time.

Group One: I think I can guess it. I think I can guess it!
Okay, I'll give you a turn.
Oh, I know! I know!
My turn!
Sh!
You have to tell me the shape and the color.
And the number! The number on it.
No. No number.
I don't care!
I know it.
(counting) 4-5-6-7-8. There are eight of these.
Can I have my turn?
Wait! It's his turn.

Orange, big, triangle.
You got it! You got it!
Yeah! Yeah! Yeah! Look it!

Okay, now! See...you find a small orange rectangle and you look for another one. I'll take one away now!

[Can I ask you Rob how you knew which one was missing?]

Rob: Well, first of all, I saw it in his hand when he went like this (demonstrates peeking into his hand).

Christopher: That was cheating, man!

Tony: Mrs. Roland! Can I tell you an easy way of doing this?...Okay. Let's say no one saw me take this one... Okay?...I'd be looking all around. Here is one...where is the other?... I'd be looking all around and I couldn't find it, so I would know it was it!

Mrs. Roland: Good method, Tony.

Nancy: Okay, my turn to take one away. Now close your eyes...Close your eyes. (takes a piece) Okay, open them. Did you take a peak?

Tony: Look! This place is empty!

Nancy: Oh, oh!

Tony: Can I go first, Nancy?...*I'm* first. I'm first! She said I was first.

Cindy: Me, second.

Christopher: I know! I know. I know. Is it something yellow?

Nancy: *No*.

Tony: Move! Move! Move! I am trying to look! Okay. There is one of those and one of those and a little triangle. A big triangle. A little triangle.

Rob: Tony, do you want me to tell you? I know it.

> Tony: No! Don't tell me! I've got it! Ah! There is one of these gone!... {suddenly dejected} Ohh...there it is.
>
> Cheryl: I know! It's the small blue square, right?
>
> {There is a slight pause as the others assess Cheryl's answer} Right!
> Ohh! She got it!
> I told you it was the blue one.

This example of the children's dialogue shows how the process of communication moves within a group as each child suggests a possibility and others decide whether that answer is accurate or not. Shifts in group priority from individual rights to group consensus are also evident.

Unexpectedly, Mrs. Wayne comes into the room. The noise level drops in waves as children realize she is here. She talks briefly with Mrs. Roland, then goes giving no indication that she sees the children. They are not her concern now. Gradually, the groups resume their activity.

Culmination of the Lesson: Discussion of Various Solutions Used by the Children

In fairness to Mrs. Roland, she does conclude the lesson with an opportunity for the children to generalize from their experience. She resumes her pedagogical accountability in the children's conceptual development. While there is still some restlessness, the children are attentive and take seriously this part of the discussion. This is the most successful part of the lesson:

> Mrs. Roland: I would like to talk to you for a minute...so that we can share a bit. People in different group figured out different ways of deciding what they thought was missing. That was one of the questions in the science books [first reference to this today]... How did you know what is missing?...All right, Nancy, what is one way?
>
>> Nancy: I looked around and said, "Okay, there is two blues...You look for two triangles or two big rectangles and if there is only one big blue rectangle, then that was the one that was missing.
>
> Mrs. Roland: So you went through the whole set to find out which one was missing. You were looking for the pairs that you knew were there. When you found one that did not have a pair, you knew that was the one. Good. Thank you. Is there a different way to do it? Lindsey?
>
>> Lindsey: I checked the colors too. There's supposed to be twelve in each...like twelve reds, twelve blues, and twelve yellows.
>
> Mrs. Roland: Good! A combination of the two. Count the colors and count the pairs. Yes, Adele?
>
>> Adele: Well, you look around and then you close your eyes and then you look around and you see a space and you know there was something in there and you just try and guess what was in there...in that spot.
>
> Mrs. Roland: So, before someone took a piece out, you were really studying the whole pattern of pieces. When they took it out, you tried to remember what was in that spot. That is kind of a guess...remembering...visualizing...taking a picture of what was there before.
>
>> Tony: I tried to do all that, then I started taking wild guesses!
>
> Mrs. Roland: That's a way. Wild guessing. Which one do you think would give you a better answer, Danny?

> Danny: That one with the first one...the pairs. I think it would be a lot easier...or the counting. Well, the combination with the pairs.

Mrs. Roland: That's the one that worked best.

Children Are Invited to Discern Why The Task Became Easier

Mrs. Roland: Did you find that it got easier and easier as you went along?

> Chorus: Hmm.

I think it did for most of you...Why do you suppose that might be?...Let me ask around. Tony has a suggestion. Is anybody else listening?...Why did it get easier, Tony?

> Tony: The reason it got easier is because I think we got it in our mind...most of the pieces and we got to know where the pieces were and when somebody took a piece out, we just knew.

That's a really good statement, Tony. It got easier because you got more familiar with the pieces that were there and after a while, without even having to pair them up, you could almost look at all of them and say "Hah! It's that one!" because very quickly your mind was able to pair them up.

> Danny: There's something else too. We played it lots of times and it got easier after every single game. It got easier because it was not a new game any more and we knew how to do it.

That's right. You knew the rules...Does anybody else have anything they would like to add about that? Anything that we missed that you would like to tell the whole grup?

> Denise: Not me

Extension of Classroom Activity Into Home and Family Exchanges

Danny: I don't have anything to add...but when you go home, you could do that with your family. You could make any shapes or use any objects.

Mrs. Roland: Right. You could use a deck of cards very easily. Because those are pairs too, aren't they?

Danny: It's hard! Harder.

Well, not much more. Most of your groups used four sets of these shapes. That's forty-eight pieces you were working with today.

Teacher's Apology

Mrs. Roland: Okay. I appreciate the fact that when we finally got the game going, it worked very well today. We had trouble getting going but that is *my* fault more than anybody else's, I must say.

Please put your science books and your duotangs away....Maybe clean up a little bit. It is about time for recess....[noise increases]...Will the last person in each row, collect the envelopes?

It is at this point that the interpretation of the lesson is important. While much of the confusion of its early phases might fall under the rubric of classroom management in its most sterile interpretation as a disciplinary mode, there is significantly more involved. The relationship between the teacher and the children--with all its semiotic flux at a personal and professional level--is critical to any "management". In her apology, Mrs. Roland openly takes responsibility for the way in which the lesson proceeded. The next lesson will begin anew. She too has learned a lesson. She will be prepared for the next time she meets with these children. But in this confused and confusing lesson, she has given us some critical baselines for creating a successful pedagogical experience.

What began as a mutual confrontation of purpose (inadvertently created and sustained), in the end became a resolution. The lesson was saved. Fortunately Mrs Roland was able to circumvented the semiotics of delay that marked so much of the lesson's beginning. If lessons that have such clear elements of failure in them can bring such reflection, how much more can we gain from lessons that are marked with success from beginning to end?

***

The Socio-semiotics of Social Studies

Much of the pedagogical relationship between teacher and class depends on their mutual acceptance of a given undertaking. How they indicate their commitment to one another and to the task brings the role of semiotics as a social interaction to the fore. How do they create and give meaning to one another in a dialectical, continuing pedagogical relationship? While aspects of this have been discussed (particularly in "Semiotics of Interpersonal Relationships" {infra.:275}), the focus here is on how this exchange of meaning is accomplished in the context of a lesson or series of lessons.

Four main ideas are considered:

1. The effect of the children's and teacher's interest or lack of it on a subject area or topic,
2. The semiotic ripple-effect created by the teacher's attitude during the lesson,
3. The elusiveness of learning as experienced by a child, and
4. The positive effects of the teacher creating semiotic links to assist the children in their understanding.

The excerpts for each of these points of discussion come from the same series of lessons, beginning with an incident related to the first social studies lesson of the unit and moving to a highly successful exchange between children and teacher as they use their social studies text, maps of Alberta townships, and lively discussion to come to an understanding of land distribution in the early settlement days of the Province.

The Effect of a Teacher's Interest or Lack of It In a Subject

Mrs. Wayne: This year we are going to be studying Indians.

> Chorus: {groans}
> Indians! Oh, no!
> Bah!
> Boo-o-o-o!
> Indians? No way!
> (loud Indian war whoop) Wa-oo-oo-ooo!
> (giggles)

Mrs. Wayne: {taken aback, stoic}...{very softly)... Remember this morning...we talked about using common sense. Do you think that reaction was common sense?

> Chorus: {contrite} No.

I don't appreciate it when I say that we are going to start our social studies and everybody goes "yu-u-uh"... You don't know anything about the social studies unit yet. The Indian Unit that we do is a really exciting unit. I think you will enjoy it. We have a couple of fieldtrips that we've planned.

{deep sigh} All right....Let's see?...In grade four, our social studies has to do with natural resources. {speaking very softly} Our natural

> resources are things that...Things that might be considered to be natural resources are soil, trees, coal, gas, and oil. In the case of the Indians that we will soon be talking about...the buffalo, the deer. Those are the things that we will talk about.
>
> Natural resources are those things, overall, that we have and should have for the future. So what we do is look at how important the buffalo was to the Indians in the past. Then we talk about the fur trade and how the country opened up. Why they built Fort Edmonton...we will go to the Fort....Then we talk about pioneers and the things that they had around them that they used to make a living for themselves. Then we will talk about the things around us today and possibilities in the future. That's an overview of things we will study. Part of that is the Indian life on the plains.
>
> For your social studies notes, almost all are handouts. The notes that you will write down will go on those sheets. That will go in a separate duotang. So I will hand those out to you now. I will give you twenty minutes or so to design a title page and color it. It will be the first thing that you will see when you open your social studies notebook, so you want to do your very best job. We will put it all together and staple it so that you will have a book. You can take it home...in about two months. So do a really nice job on this title page, please.

Rather symbolically, the inauspicious beginning to the social studies unit--the children's instantaneous and negative reaction to the announcement of the topic--proves to be more than an unexpected objection. In a number of interviews, Mrs. Wayne very clearly indicates that social studies is her least successful subject area, that she is less prepared and experienced to teach it, and that she has no natural inclination for the type of study it involves.

The children's reaction to the announcement of the topic might be considered an overreaction. But how else are they to make their feelings known? Theirs is not an orchestrated response but an explosive and honest one. It is based on the fact that many of this group of children studied "Indians" in grade two (as a comprehensive unit) with a highly skilled and creative teacher. One of their projects had been to study the symbolism of the West Coast Haida people and to design nine-foot totems on butcher paper and affix them to the entry into their hallway. Now there is an implicit suggestion that they will have to re-do what they had already done two years before. One can only feel empathy for children who are caught in the transition of a social studies curriculum that brings them so soon before the Indian studies again. In no way is theirs a prejudicial reaction to Indian culture. It is rather the genuine reaction of children who have for the first time entered Division Two. They are grade fours. The suggestion that they should return to grade two work is completely untenable for them.

This understood, as the unit progresses it occasionally suffers from this previous curricular exposure. There is little that Mrs. Wayne can bring that is fresh and stimulating. Many of the films she orders have already been seen by the children. The crafts she incorporates into the unit have already been tried. The concepts of conservation form the "serious" part of the study but the children have little appreciation of this. They are young. They live in an urban society where what they see and use comes vacuum-packed. For them, these things have no origin other than the local shopping-mall or the nearby convenience-store. On that first day of school, their spontanteously-voiced objections to this particular unit of study accurately anticipates their future resistance. They do not want to repeat this unit of study (as they see it). They are not attracted to the description of the natural resources focus. Mrs. Wayne must go beyond the justification first given to the children, an explanation that (as we see it in print) has the feel of a curriculum objectives page rather than a rationale that children might appreciate. Their attitude toward the topic does change and their inerest is awakened but it does take time.

The objection voicedby the children is an undeniable sign to Mrs. Wayne. Staring from this negative base, the unit of study obviously does not have the same impetus from the children's point of view that a more appealing and more interesting one might evke. Subsequent lessons take this into account.

It is rare for youngchildren to express so emphatically their dislike of a topicto their teacher. Ironically, the blow strikes Mrs. Wayne at her most vulnerable point--the subject area that she does not particularly like or enjoy. The children's protest may well have been echoed in her own own mind. But there are no alternatives; the curriculum must be taught.

While the situation that Mrs. Wayne faces is rare, sooner or later every teacher faces this dilemma. Teachers are asked to teach subjects from which they derive little personal or methodological pleasure. They do find some teaching tasks more difficult than others. Usually, they follow through with reasonable aplomb. Despite the unbalancing first response from the children, Mrs. Wayne does carry on remarkably well. There are many good lessons during the duration of the unit. It culminates in a visit to the Indian Gallery at the Provincial Museum which the children enjoy immensely (infra.:235). All ends very well indeed.

It is, therefore, with some trepidation that I include these excerpts but to have left them out would deny the existence of a form of reality that many teachers face.

The Ripple-Effect of the Teacher's Attitude

The social studies lesson is about to begin. The classroom is noisy as Mrs. Wayne hurries back to her desk to collect the social studies text. She returns to the front of the room and waits, her arms crossed. She is not smiling. Danny begins talking to Tony, then to Denise. Mrs. Wayne rolls her eyes at the ceiling. She purses her lips and waits. She scans the class, purses her lips again, and goes to sit on a chair to the side. Lisa notices this and scurries back to her desk. "You guys! Mrs.Wayne is waiting." Mrs. Wayne looks down at the book in her lap. Finally she looks up. Jimmy is still talking to Ian. Gradually the class becomes quiet and all the children sit very still. Now they wait.

Is Mrs. Wayne, in her nonverbal gestures and movement, signalling that she wants their attention, or is she showing that she does not want to teach this lesson? Social studies is her least preferred subject. Knowing this, it seems appropriate to read her behavior as indicating a reluctance to continue (or even to begin) the lesson. Her prolonged waiting, conspicuous as it is, suggests that she is prepared to wait it out or that she does not seriously mind the time passing, lessening as it does the length of time she must give to the lesson itself. The extreme wait--only minutes but sensed as much longer by some of the children, especially the conscientious ones who almost plead for class cooperation and silence--seems foreboding. As I suspect many children do, I anticipate that Mrs. Wayne will scold rather sternly. Surprisingly, she defuses the situation by sharing an observation with them that draws those who are obedient and attentive to her side of the situation:

Mrs. Wayne: {softly} I know some of you can really understand nonverbal language.

> {Many laugh. Some who had been talking look around in confusion.}

Last time we had social studies, which was yesterday...I am still waiting for a few people to be ready....

> Marie: {over her shoulder to her classmates} Sh-h-h-!

I am waiting and about twenty-four other people are waiting as well....

> Marie: {even angrier} Sh-h-h-!

I will tell the whole class once instead of twenty-seven people, one at a time... Okay, Brian?

{louder and more decisively} Yesterday we talked about how the pioneers, once they arrived here, had to, first of all, clear the land. That was the first step to preparing the new land where they would farm. Now we know that for millions of years ...we don't really know how long...the land had never been plowed and it had never been planted, other than what was growing there naturally. {Walks over to Brian, who doesn't even realize that she is approaching}.

> {Children giggle. Brian continues to play with his toy. She reaches down and takes it.}

{quietly, to Brian} Now you won't have to be bother with it. I will put it away for this afternoon.

> {More giggling}

> Shawn: He sure is dumb!

Mrs. Wayne: Okay...The pioneers have the land cleared. On page 30, you will find out that that isn't enough. They cleared the land at the beginning. Now, they have to prepare the land in order to get their farming done. Open up your books to page 30. We will read this out loud, please. Okay: Preparing the Ground...I need a volunteer... {hands rise}. Don? The first paragraph please.

> Don: {reading} Before the farmer could plant his seeds, he had to prepare the ground. The ground must be broken for the seeds to grow well. The roots must be able to make their way through the earth.

[Different children read the short chapter. Mrs. Wayne helps with words the children do not know.]

How many of you have ever dug in a garden? Why do you suppose the farmer had to break up the lumps of dirt?

> Lindsey: If you didn't break them up, they wouldn't be nice and soft for the seeds to grow in. If the dirt is nice and soft, then the seeds can send their roots out without any problem.

Mrs. Wayne: How many of you have ever helped in the garden or in the flower bed? You know how much work that is. Can you imagine doing a whole farm!

> {General reaction of wonder and awe}
>
> Ian: When my dad put in the lawn, we used a roller. Then we shook the seeds into some sand and then in a box. We spread it around and then a thing that really packed it in. It was really hard to handle because it bounces up and down and it takes off! Yeah, it's really hard.
>
> Marie: When I was on holidays with my mother, we planted vegetables because we didn't want to run back and forth to the place. So we planted some vegetables and then we planted some little radishes. They asked me to help. We had to do the flowers in a bed all along the fence.

Mrs. Wayne: You are making it clear that it does take a lot of effort. Look at the picture of the lady sowing seeds. Who can tell us what is the meaning of "to sow seeds"?

> Nancy: Sowing seeds means you plant them.

Mrs. Wayne: {seeing Sarah's puzzlement} It is a synomym, Sarah, for "plant". To plant seeds. Look at the picture for a minute. Notice the bag the lady is carrying over her shoulder. Look, why are they dropping fish into the hole for the plants? What does a fish have to do with growing vegetables or grain?

Carmen: It helps the garden grow very good.

Andrew: It adds nutrients.

Mrs. Wayne: Exactly! It adds nutrients to the soil. What other word could we use for it?

Tony: Fertilizer.

Mrs. Wayne: Right, "fertilizer". Look at "Sowing the seeds." Look at how it is spelled. S-o-w... Okay, let's have...Lindsey read this part.

What we have witnessed is an important transformation: a teacher who doesn't want to teach and children who don't want to learn gradually becoming involved in the topic. They both move from reluctance to interest, even eagerness. At a pivotal moment, Mrs. Wayne's despondent mood leaves her: when she says, "I know some of you really understand nonverbal language." Those who smile or chuckle knowingly tell her by doing so that they understand her dilemma and support her. She immediately feels this. Her timetable commitment to the social studies lesson takes on a deeper commitment, to the children. Not to all of them yet, but to most of them. There is a delay because some children are still not paying attention. In a moment, they are. This is similar to the delay in the science lesson described earlier but, here, the swing is toward the lesson, not away from it. A second and extended reprimand, emphasizing the need for group cooperation and the impossiblity of Mrs. Wayne teaching each child individually draws all but one to her purpose.

Brian's total fascination in his balancing magnetic toy holds him in his own sphere. As if sensing this, Mrs. Wayne walks to him and takes it away from him. The subtlety with which she does this delights the class. They are proud of her! They share in the humour of it. Brian sheepishly grins up at her and the lesson goes on.

With a semiotic togetherness established, Mrs. Wayne continues the lesson, inviting and acknowledging the children's own experiences of working on the land. There is a singularity of purpose and there are no further breaks in the continuity of the lesson. It is rather a long and concentrated lesson lasting some thirty minutes. As it shifts into a consolidating activity, there is an interesting falling away of commitment.

Time: Twenty-five minutes to two

> Mrs. Wayne: Instead of giving you notes on this, I am going to put five questions on the board for you to answer and then I would like to you get a blank paper from here and draw a picture of pioneers planting a garden.
>
> {general outburst of talking}
>
> I want you to draw a picture of what we have read about today. You can decide exactly what you would like to show.
>
> {much more chatter}

> [Cindy, class monitor for the week, gets the art paper and puts it on the table in the front of the room. When she comes back to her desk near to where I am sitting, I ask her: Why are the kids talking so much now?]
>
> > Because Mrs. Wayne is up at the front. And they always do that. When she's up at the blackboard and not looking at them, they talk.
>
> [Oh, when she is not looking at them, it is okay?]
>
> > Yeah!

The semiotics Mrs. Wayne uses: looking at the children and expecting attention and not looking at them as freeing them is obviously mutually understood. In conversations with Mrs. Wayne, it is also clear that she understands the children's need to move about, to talk with their friends, and to have an interlude away from the concentration of core lessons. This is such an interlude. But it becomes more. The following excerpt comes from the transcript of an audiotape made during this time (as I whispered into the taperecorder the description of the transition from directed discussion to independent question-answering).

Time: Twenty-two minutes to two

> [General talking, everyone easy and moving around. Marie is reading the newsletter. A teacher has just come in, goes up to talk to Mrs. Wayne. Jimmy is singing the tune to "um-pum-pum-pum" {Drummer Boy from a month before!}. Danny is calling across two rows to Andrew. Marnie is talking to Carmen.
>
> Nancy has walked across the room to Denise's desk. Lisa is talking to Kathy. Cindy is skipping down the middle aisle and around the

back. Paul is kneeling on his seat with his hand up, looking rather wistfully. Sarah has a ring that is extremely tight on her finger and she is very agitated about it, but can't get it off. Class much quieter now.

Time: Twenty minutes to two.

Mrs. Wayne is now writing the questions on the board but no one that I can see is responding. Nancy just looked up now and is starting question one. Bonnie, I believe, has been working. Marnie is writing. Lindsey is starting. Denise is writing. General chat. Roxanne leans over to Carmen and talks.

Paul is getting out of his desk, goes to the front. Goes to sharpen his pencil. His original reason for raising his hand? Don and Tony are already at the pencil sharpener. Andrew is swinging his torso back and forth across his desk. Nathan turns around to watch.

Tony is talking to Danny over the whole row. Rob is talking to Don beside him. Denise is chatting now. Bonnie is getting out of her desk and walks down the aisle, goes to the pencil sharpener. Drifting back now. Nadeen says to Mrs. Wayne that she can't "write". Adele is up at the board concerned about how her large pencil can be sharpened. Mrs. Wayne adjusts the pencil sharpener and sharpens it for her. Adele does a little knee bend thank-you. Has her pencil under her chin, walking back slowly .

Matthew is out of his seat and standing at Nathan's desk. Comes back. Lisa is turning around to see what they are doing. Tony and Danny meeting half-way between their desks and talking. Mrs. Wayne sits at the front table. Cindy is having some trouble with opening her pencilbox. Mrs. Wayne signals with a finger coax and is now trying to open it for her.

Denise turning around to talk to Nancy. Marie has her hand up. Nadeen is turning around and talking to Danny. Matthew is standing at the side of the cupboard and turning pages in a book. Lindsey is turning around. Much chatter throughout the room. Marie talking to Mrs. Wayne about a question. Ian comes to talk to Mrs. Wayne. She is leaning on her elbow as she listens. Matthew is still standing with the book. Mrs. Wayne talks to Nathan across the room. "Come on. You started out so well this morning."

Lisa closes up Sarah's jewel box. Mrs. Wayne speaks to several around her. "You are to do that first paragraph before anything else."

Time: Eighteen minutes to two

Tony joining group around Mrs. Wayne. Adele's question had to do with write the letter "o" properly and she chants "o-o-o-o-" on the way back to her desk. Tony talking to Mrs. Wayne. Now Nancy is going up. Carmen is at Marnie's desk. Matthew is still standing at the cupboard.

Time: Seventeen minutes to two

[Total time lapse since Mrs. Wayne's instructions to answer the questions on the blackboard: seven minutes.]

If, when reading the transcript, you have the sensation of saying, "Enough"!, then it will be easy to point out the importance of movement, objects, and friends for the children. They are moving about to loosen their bodies from a lengthy sitting session and to "touch base" with their friends. They put their own affairs and resources in order; sharpen pencils, ask questions to help them with their assignment, or subtly renew their relationship with Mrs. Wayne. All of this occurs with Mrs. Wayne's implicit approval for freedom of movement and speech is permitted at this time.

All this is understandable and the semiotics of interpersonal relationships are highly visible. However, something else is taking place that is less intended. This was to have been an independent session with the children writing answers to the questions on the board. These questions are intended to synthesize earlier discussions about land preparation prior to the pioneers seeding their grain. It is apparent that neither Mrs. Wayne nor the children take the assignment seriously. The children take their cue for casualness in this matter from Mrs. Wayne. Since she does not indicate (except indirectly) that they are to remain in their desks and work quietly and continuously at their assignment, they need no other invitation to treat the task lightly and engage in personal conversations around the room. Just as Mrs. Wayne's control of the lesson earlier gave it its vitality, her seeming withdrawal from the serious nature of the assignment is interpreted by the children as approval for whatever it is they are doing at the moment.

What is of even greater significance is that under her approval, the children learn that (at least for today) the experience of note-taking and question-answering is not to be taken seriously. But as grade four students, they are expected to become increasingly responsible for formulating their own answers from given and implied information. However, their behavior suggests that they do not want to face this particular task. They are not long from a dependency of fill-in-the-blanks type of assignments typical of their earlier years when they were new to the written-answer format and when some were still learning to print. Even now Nadeen remarks that she is uneasy that she cannot yet "write". When the children should be developing independence in writing and thinking, they are enjoying a prolonged informal time. One can only question whether Mrs. Wayne fully realizes the deflection of her original intentions.

This entire lesson becomes an illustration of the semiotic cycle that is set in motion between a teacher and her class. The teacher is the key. When, in a number of ways, she signs that the pedagogical process is to be undertaken purposefully (although not necessarily stolidly), the children are likely to respond. Where she withdraws from the situation, they withdraw as well. This is not to say that the teacher must dominate the pedagogical process with her presence and her words, but that by her actions she sets the tone and the pace of the pedagogical interaction. It is as if she sounds the note "A" that is to be the basis for the harmony that is to follow. This need not be a persistent occurrence, but rather one timed just frequently enough to remind everyone of the intent of their tasks and of their being together in a pedagogical situation.

The Elusiveness of Learning

The next day, Mrs. Wayne is checking the children's answer to the blackboard assignment by having them come to her desk individually. She is talking with Roxanne now:

> Mrs. Wayne: Do you remember what the "hard clods of soil" were? How did the land get into hard clumps?]
>
> Roxanne: {shrugs}
>
> What was on the land first?
>
> The trees!
>
> Right. Then they cut them down. What would you have left?
>
> The soil.
>
> Yes, but it would be all around the stumps. They are still there, you know. When the men heaved up the stumps, the roots pulled the soil, but the soil came in huge clumps...lumps. You can't plant your seeds in soil like that. So how are you going to break it up?]
>
> ...I don't know....
>
> Well, it tells you in your book. I know how I would do it. I would just beat it up!
>
> {Roxanne turning the pages in her book} It says it somewhere right here.
>
> Oh, good! Read it for me.
>
> {reads} In the days, the pioneers would break up the land with a hoe or a mat...?...
>
> You know the first part...keep going.
>
> Mat-tock? What's that?
>
> Isn't there a picture of the tools? (turns page over) It doesn't show up here, does it?...Well, it says "hoe or mattock", so it would be something like a hoe.]

What's a hoe?

(sketches one quickly) It is....like this. I've got a garden one like that. It has the metal that holds the blade to the handle here.]

(suddenly knows) Oh! You smooth the ground with it.

Yes. But if they are going to break up clumps with it, what are they going to do?]

(shrugs)

They are going to hack...{demonstrates}. In fact, I think that is the word that they used in the story. {finds it and reads} ...With a hoe or mattock, he would hack at the hard ground with his tool, trying to break up the hard clods of earth.]

Oh, that's how he broke it up!

Right! Now you know.

This may be the most valuable example in my collection, gathered quite unwittingly when I left my taperecorder running at the table in front of the teacher's desk as I helped other children elsewhere in the room. My first reaction on hearing the play-back was one of stunned awareness of Roxanne's complete lack of understanding of what the story, the discussion, and the questions of the previous social studies lesson had considered. To some, it may appear a small matter. What does it matter whether Roxanne knows what a "mattock" is or not? How many of us knew before we read the explanation? How many of us can make the distinction between hoe and mattock? But it does matter in a pedagogical sense. Critically. Roxanne is identified as and performs in the context of being an average student. If she does not understand, how many others do not? This is the same issue that arose with Tony's "sumac red maple" (infra:496), and there is more at stake here than a particular episode in a particular lesson.

Roxanne's lack of understanding can be explained away. An astute teacher may realize that Roxanne does not recognize that the form of the phrase is an aid to her understanding: "With a hoe or mattock...", is a common form of definition where one word is a near-equivalent to others. In this case, the "or" acts as a fulcrum equating the two words, the two meanings. The teacher may then follow with lessons on the linguistic and structural patterns that are useful in helping a reader understand what he does not yet know. However, Christopher is likely to come up with a question like: Does that mean that "With a hoe or shovel" means a shovel is like a hoe? The complications grow. But in this case, Roxanne does not know what a "hoe" is. When an illustration is drawn, she knows! "A hoe! Now I know!" But when she needed that understanding, she had only the label--the sign--for that gardening tool. "Mat...tock? What's that?" Prior to her moment of understanding, she did not have the resources with which to meet the problem. In Pelc's terms, she had no designatum: no background information or experience to bring to the sign to give it meaning. Consequently, she could give it no meaning, no interpretant. More importantly, faulted at this early point in the story, she could not bring meaning to nor fully understand what followed.

Another interpretation for Roxanne's lack of understanding comes from a more sociological point of view. Many children live in apartments and townhouses without gardens. Some children have no firsthand experiences associated with the land as land. Clearly, from the transcript, some do. But how many others have touched the soil since they were four years olds playing at the curb and swirling dirt with a stick? How many think soil is what you buy in plastic bags at the shopping centre and put in flower pots? However, in the rush of children who do have related experiences and are so eager to talk about them, most teachers may assume (with Mrs. Wayne) that the experience of gardening is common to all.

This example demonstrates so markedly that unless children have some sign-repertoire upon which to build understanding, they flounder in trying to bring to and get meaning from the printed word and from the discussion. Further, they seem to have an implicit self-agreement not to ask when they do not understand. It may be that the context in which the discussion occurs strongly suggests that all others do understand. To ask a question would reveal their own and seemingly unique lack of understanding. It would expose their ignorance to everyone but especially to the teacher. Does not the teacher judge you by what you know rather than by what you don't know? Is the children's silence then "protective"? And again, are they so accustomed to not knowing that they do not take any action to indicate to the teacher that they are bewildered?

This is indeed an insidious pedagogical problem. It is true that where children do not hold certain knowledge, the teacher can usually "sense" their uncertainty. However, where gaps in understanding arise from specific words and phrases (often quite miniscule in comparison to the total concept), these gaps may easily remain undetected. This might lead to what might be called the elusiveness of learning. In turn, this fosters the illusion of learning--a seeming perpetuation-of-understanding where there is none. It may be appropriate to re-read Roxanne's excerpt with this in mind. She did not understand and, except for the teacher's fortuitous timing, might easily have never understood.

But how is the best-intended teacher to discern a child's confusion? How is she to know where these gaps exist? How is she to ensure that the linkages are sure and strong? How is the child to pinpoint the moment when what is presented and understood veers into territory unfamiliar, unconnected, and puzzling? As the instant of that first ambiguity passes, the child grasps for the next meaningful moment. In that moment is the unknown. The teacher has no way of knowing what is occurring in the child's mind. The child continues his search for meaning and for what carries that meaning. He swings like a jungle monkey, grasping vine to vine. Some are rich and

and secure in meaning. Some slip through his hands and he falls into ambiguity. How far he falls depends on the meaning nets beneath him and the alertness of the teacher to position those nets in strategic places.

Mrs. Wayne speaks on the challenge this involves:

> Mrs. Wayne: I regard it a good lesson when none of the kids get frustrated. Then I don't get frustrated either. They would all be listening. The majority will understand the concept I am trying to get across. If I ask them to explain what it meant, then they are able to explain it in their own way. They would be paying attention to what we are discussing and would ask questions about it that make sense, not just silly ones or irrelevant ones.
>
> As soon as you get something too difficult for them--either because what you are teaching is too difficult that they are not listening or they just don't feel like listening then--it is too hard for them. Then you have to handle each one individually. As soon as you have to do that in an information lesson, it wrecks the whole thing.
>
> Whereas in a good lesson, you don't have to individualize. You may have to help Brian or Jimmy or Cheryl or anyone. But not all at the same time. You help them and they are able to do one or more questions on their own. Then you go back and help them some more. They don't quit before they start. I don't mind helping them to get started. I'd rather do that than have them have the whole thing wrong.
>
> In a good lesson, the kids participate in the discussion. I might present some facts, talk about them, and they have intelligent things to add. They may have seen something on television or read about it or maybe it's something their parents know a lot about. It all comes right to the point.

> It all links back. That's why I lead the discussion. I keep emphasizing the objectives of the particular unit. If someone says, "My grandmom did that...", I will say, "Oh, she used the natural resources of the area." I will try to link it as much as possible to our themes. There is usually a connection somewhere. If, as a whole class, they don't make the link, I have done something wrong. But there will always be two or three in here who don't know what natural resources are.
>
> I can try to help them understand but, in the end, there's a limit to my responsibility. I have done everything I could to teach that. Ninety-five percent of the class understand it. I will never have every child understand everything fully. I have to accept that.

Mrs. Wayne uses an interesting phrase: to get it across. She is obviously willing to put a great deal of effort into helping the children understand but she can only stretch out her hand with the knowledge toward the child. The child must reach to take it onto himself. If Mrs. Wayne carries that knowledge across and places it beside the child, it has no meaning for the child. It is the teacher's knowledge not the child's. The child must be a participant in the pedagogical process. Realistically, Mrs. Wayne accepts that their paths may diverge. Teacher and child can meet and pass by each other without any significant interaction. But where their paths intersect and merge, there will be understanding.

Earlier, reference was made to Uexkull's semiotic model of symbiosis. It is eminently appropriate to see the teacher and the child in their pedagogical relationship in this light. It calls for a particularly fine attunement one for the another, a trust in bringing ambiguity to the fore and a reassurance that an appreciation of the process of learning is held by the one who teaches. A young child has a natural and persistent "Why?" or "How come?" stage. Teachers might keep that refrain in mind so that if a child does not--can not--ask it aloud, she may anticipate when it might be implicitly there: in his troubled eyes, his slouch, his withdrawal from task, his disruptive behavior, his unhappiness, or in his verbosity. Of all the recommendations that could be made for effective teaching, this might be the most significant one. But the answer does not lie in the teacher's explanations but in the child's. In his own words and in his own way, does he understand what he needs to understand to take the next step in his learning? Does his teacher hear what he is saying?

The Positive Effect of the Teacher Creating Semiotic Links From the Children's World to a Pedagogical World

The scene: the children have two important pieces of paper on their desks: a blank application form which is a simplified facsimilie of the type of forms required of homesteaders applying for government lands in what was to become the Province of Alberta, and a township map on which the children are to locate their land allotment. The presence of these forms lead easily into Mrs. Wayne's invitation that the children imagine they are homesteaders who have just arrived at the Strathcona Railway Station with hopes of prospering on the land. They are of course children sitting in a grade four classroom but they are, simultaneously, excited pioneers planning their future. As children, they are filling out a form, something they rarely do in their own lives. As homesteaders, they are anxious to fill it out correctly. This semiotic shift in-and-out of their classroom world and the historic world occurs frequently throughout the lesson. No one is in the least confused about which is which, and everyone responds in the tone of the era in which the dialogue is set.

> Mrs. Wayne: {pretending she is the land agent} You have before you, ladies and gentlemen, the required forms. Please look at your application form. I will assist you in filling it out. It reads:
>
> I...(There you see a blank.) Please write your full names there....Good! Next you see "of" and here, write where you are from. Where you have been living before coming to Canada. Some of you, I know, have come from Fort Garry and some from as far away as England. Welcome! Welcome! There's a family from Quebec too. {pretending to wave to the family} Bienvenue! {to the class} Nice folks, aren't they?
>
> {Children giggle at her animation}

Mrs. Wayne: {as teacher} I see some of you have written that you are from Edmonton. That's true today. But remember you have just arrived here. You are from some place else. Some place east of here. You are coming out here to homestead.

{Several children hurriedly erasing and correcting their place of origin. Mrs. Wayne continues to walk slowly up and down the aisle, checking their work as the lesson proceeds.}

Mrs. Wayne: {as land agent} Very good, ladies and gentlemen. Shall we go on?

Children as children:
Sure!
Okay!
Yeah!

Others in homesteader role:
Certainly, sir.
Yes. Yes.
Where do I put my wife's name? And my kids?

Mrs. Wayne: (as land agent) Any questions, I will answer later. Any problems, we get to them later, folks. Most of you have filled in where you have come from. Let's go on: {reading from form} I... (so and so) ..from... (wherever)... {loudly}... hereby agree to abide by the provisions of the Dominion Lands Act.

Now folks, this gets a little complicated. You all have in your possession, in your billfold, your purse or your pocket or wherever you keep your valuables...your own land allotment on that slip of paper I gave you earlier.

{as teacher} The township maps we worked on yesterday when you decided where you would start your homestead. I checked them last night and wrote your section number on it. I'll explain later how I got it.

{Children pull the map out from under the application form.}

Mrs. Wayne: {as agent} Please write in your own description of the land you were allotted. You each have a different land claim. Your numbers will be different from anyone else's. Don't worry. That is the way it should be. What is your section number? Write that in. Good!

> Now, everybody will have the same from here on. It is...{reads}...of the fifty-four township...in the twenty-first range...west of the fifth meridian.
>
> > {Children writing, comparing and talking to one another about the application form.}
>
> Now...where it says: signature...You sign.
>
> > Tony: That makes it legal.
> >
> > Danny: Well, sort of. See? I own this part of the land. Here, in the classroom, right around my desk area.

It would have been entirely possible for Mrs. Wayne to have had the children simply fill out the application forms as an exercise undifferentiated from any other. However, by dramatizing the situation, Mrs. Wayne creates a meaningful context for the children, one in which they become key players. The semiotic shift between 1984 and 1885 when the railway reached Edmonton is of course imaginary. But most learning is a projection of the self into the possibilities of another time or place or sphere of ideas.

The next portion of the lesson is conducted without a shift in time but it leads the children into another space. They do not go to the township west of the city and walk or drive along its boundaries and no one suggests it. But they do work on the township map on their desks. The concepts are totally unfamiliar and complex and the children must be themselves to concentrate on what Mrs. Wayne is teaching them. Mrs. Wayne is no longer the land agent. The children are no longer homesteaders. At no point did anyone say the shift had to be made nor does anyone comment on it now. It is simply assumed. It is more fitting that they be "teacher" and "class" now.

Teacher's Copy of Children's Map as Semiotic Reinforcer

Mrs. Wayne: Please take out your township map. {holds up a sample} Each township is divided into thirty-six sections. Now to find where your homestead is you have to know three things. One is given on your map. It is called the fifth meridian. It is on the right-hand side of your map. {holds up map and points to the right side} The meridians are lines that go north and south on your map...on all maps.

{sets transparency on the overhead projector...it is a copy of what the children have on their desks} Take out your ruler and a red pencil. {draws a red line on the transparency} There. Draw a red line down the fifth meridian on your map.

Now if you look here...{places transparency of an Alberta map} This is Alberta. What you have is just one small part of the map. A township. But I want to explain about meridians first. They are the north and south lines on this map. {points to red line along the fifth meridian} This is the fifth meridian.

[The principal comes to the door, beckons to Mrs. Wayne and she goes out of the room.]

Teacher's Absence Shifts Children's Semiotic Focus to Themselves

> [Children begin talking to one another the moment they sense that she might not be coming back immediately, they turn to other things. Some take out their free-reading books. Some meet in small groups. Some look at their township maps and at where they had

> placed their land site. Had Mrs. Wayne suggested a particular task during her absence, the children would have been in a limited semiotic range. Now, it is an open one.]

Teacher Refocuses Attention to the Transparency

Mrs. Wayne: Let's get back to where we were. This is the fifth meridian. Now, if you go out on Highway Sixteen, west of the city towards Stony Plain, {points to Edmonton on the map} you would have to go west from Edmonton. {moves finger toward Stony Plain on the map}

Relating Abstract Map Indicators to A Town That The Children May be Familiar With

How many have been in the town of Stony Plain or driving through?

> {A number raise their hands and are ready to talk about it. Mrs. Wayne nods to them and goes on.}

Children's Recognition of Landmarks in Alberta Help Consolidate Learnng

The overpass at Stony Plain is the fifth meridian and if you were able to draw a line, right along here {points along the colored line on transparency as she speaks} through Stony Plain, just west of Edmonton, and continue it down, down...the fifth meridian goes through the east part of Calgary.

Child Takes Teacher's Explanation Literally

> Tony: I don't get it. You said the Stony Plain overpass is the fifth meridian.

Mrs. Wayne: Oh, dear. No, what I meant was that the overpass at Stony Plain is where the fifth meridian is when we use maps. Now, obviously there isn't a line painted down from the top to the bottom of Alberta. It is an imaginary line. It is simply a way that we have figured out so we can tell where we are. The lines are drawn on maps to show this. But there is no real marking on the land. Okay?

Mrs. Wayne continues the rather complex explanation of range lines west of the fifth meridian as one of a number of geographic identifiers or indices. Using the transparency, she goes on to explain that the thirty range lines between the meridians run north and south and that the township indicators run east and west and are counted continuously from the south boundary of Alberta to the north. The lesson continues with emphasis on the township map and the location of the children's land site. For practice purposes, she has chosen one child's land site as an example and carefully leads the children step-by-step to locate it on their own maps by following her sequence as she illustrates it on the transparency.

> Mrs. Wayne: {putting an X on the transparency} So there you are! On the fifty-four township, the twenty-first range. Remember that's west of the fifth meridian. And we found section 27, Jimmy's homestead!
>
> > Danny: {deep sigh}
> > Adele: That's hard.
> > Marie: It is not!
> >
> > Matthew: Do we have to do any more? I'm tired.
>
> Mrs. Wayne: {smiling at him} No. Not today. And you will find it much easier tomorrow. You won't have any trouble finding your homestead.
>
> > Matthew: {shaking his head} I don't know.

Mrs. Wayne is an experienced teacher who knows that is enough for today--for all of them. The next lesson is lighter. The children locate their own homesteads and discuss how the land was cleared and how their sod houses will be built.

Clarifying Child's Understanding by Way of Diagram and Explanation

Mrs. Wayne: {refers to a drawing of a tree trunk she has put on the blackboard and pointing to the notched side} This is going to just "give way". It will fall down that way. {sketches tree falling and erases sketch of previous standing tree} You have to be an experienced woodsman in order to cut down the trees. You don't want any trees falling on top of you.

Child Adds Information

Danny: You always have to cut the tree as low as you possible can.

Teacher Acknowledges Child's Experience

Oh, is that right? I know you often go out with your dad, so I guess you are an experienced woodsman. You know, don't you?

{smiles at him and then refers to her diagram on the blackboard} The teacher *isn't* an experienced artist.

Children Share Moment with Her

{gentle chuckles}

Homesteader Letter as Focus for Information Giving

Let's continue from there: {reads from homesteader's letter to his family telling about removing the bark and notching the logs for a framework for a small hut to be covered with sods}

New Supportive Information Introduced

{reading from the letter} There is a version of the

Alberta homesteader's song that goes like this:

> My house is filled with natural soil.
> My walls are erected according to Doyle.
> My roof is low-pitched. It is level and
> plain.
> And I always get wet when it happens to rain.

Teacher Sings the Song: Semiotic Variation

I happen to know that song. {Sings it to the tune of the Irish Jig}

> {Children surprised, amused, a few are embarrassed. Soon they are all moving to the rhythm of the song and joining in with Mrs. Wayne.}

I'll teach you more of the song later. There must be ten verses or so.

> Children: Yeah!
> Great!
> Neato!

{reading again} I am told that sod houses are warm in winter but cool in summer. Unfortunately, the sods have a habit of shrinking and the roof starts to leak! {mimes looking up at the ceiling and trying to dodge the leaks}

> {chuckles all around}

{reading} You have to build a new house every few years.

> Adele: Huhh!

Can you imagine!

As with the comma lesson, this lesson is taught by this teacher for these children. While the outline and resources for the unit are available to all grade four teachers, the lesson takes on a distinctive shape and sequence because of the relationship of the teacher and her class. Mrs. Wayne's easy musicality brings an extra touch to many of her lessons. Because of her, the song becomes more than printed words on a page. It becomes a song sung by people and soon the children will be among those who enjoy it.

We have seen too a counterpoint in the style and intensity of the lessons presented. These excerpts are from consecutive lessons. They began with the dramatization of homesteaders arriving in Strathcona to become citizens of this country. The application form and the township map required concentration and accuracy from the children. The discussion of the building of the sodhouse stressed the hard work involved, and added the humour of song.

Variety is an important part of the pedagogical process and it is well-represented here. The melding of the semiotic of interpersonal relationships and the semiotics of pedagogy (never truly inseparable except for analysis) gives these lessons their momentum. The easy movement between reality and imagination, between the concrete and the abstract, and from the present to the past, adds significantly to their success. What an experienced teacher does so well cannot be documented as steps-to-be-followed. Success comes from many interconnecting factors, but pausing a moment to look upon that success brings its own rewards.

8

These lessons were selected as representative of socio-semiotics. They show how critical teacher interest, attitude, and commitment are in successful pedagogy. These three qualities form the semiotic foundation of methodological skills, the signs from the teacher to the children that draw the children into the lesson and into new knowledge and appreciations. The effect of the teacher's interest, attitude, and commitment upon the children is almost invariably and instantaneously noticeable. In implicit response, children create (for their teacher) signs of receptiveness, cooperation, or resistance. But they do not do this in isolation; they react and respond to the context which the teacher creates around them.

What matters most is not what a teacher's principles of class instruction are but how she handles a specific and often fleeting moment. We have seen that it is no simple thing to accomplish this successfully. There are failures in teaching, many of them. Every teacher that ever was, has created and felt failure. Every teacher that ever will be, will do the same. To say that we learn from our failures as much as we learn from our successes may be a cliche. But cliches do have their roots in experience and this cycle of social studies lessons is firmly rooted in experience. We can learn from them and we must.

Reading: A Shared Semiotic Experience

The teaching of reading in the elementary classroom falls under many rubrics: directed reading, guided reading, free reading, independent reading, story-time, sustained silent reading, oral reading, choral reading, content reading, or critical reading. Further, it is the basis for most subject areas taught: social studies, science, mathematics, drama, music, and especially the language arts. Only in art and physical education is there rarely mention made of reading as a complement to these activities. When a young child comes to school and is asked why he is there, he invariably answers: "To learn to read." Soon after he has mastered a few words, he exclaims, "I can read!". And he has taken the most important step he ever will take in reading: he has made the link between the strange, arbitrary markings on the white paper and his own world. He discovers that he can understand what these words refer to, and that he can put his own ideas into that form and others will understand him.

Questions associated with the teaching of reading have given rise to more educational research that any other instructional area. This recognizes that reading is fundamental to contemporary pedagogy, and that we have not yet arrived at a full understanding of all the mysteries that underlie how children learn to read and how teachers can best assist them in that process. That this is dependent on semiosis is so self-evident that it is inevitable that much of the research centres on the child's mastering the phonemic structure of reading and the ways in which he gets meaning from the printed page. The focus of these studies ranges from preschool to adult readers. It is a subject extensive enough in its own right that no attempt is made here to contribute to an understanding of the process of reading per se.

Rather, based on the observations of a grade four class, three main ideas will be discussed in the context of general semiotics rather than specific.

1. The teacher as a pedagogical guide in the interpretation of the meaning of the text.

2. The teacher as a catalyst in an interpretive experience.

3. Children as affected by sign-saturation.

Eco (1984) makes a differentiation by describing specific semiotics as the "grammar" of a particular sign system which concentrates on objective structural analysis i.e., lexical analysis of the system of signification or code of a given language, and general semiotics as the philosophy of language which concerns itself more with the concept of the sign as stemming from and leading to acts of human behavior.

> What does it mean for human beings to say, to express meanings, to convey ideas, or to mention states of the world? By which means do people perform this tasks? Only by words? And, if not, what do verbal activity and other signifying or communicative activities have in common?
> (ibid.:7)

These questions have an ancient history and centre more on philosophical speculation of the process of interpretation than on the more "scientific" analysis of textual strategies in and of themselves. In describing how texts can be produced and interpreted, Eco suggests that the "universe of semiosis can be postulated in the format of a labyrinth" (ibid.:2). Facing with this challenge, he sees general semiotics as a preferable approach in describing a coherent point of view of the whole of human activity. He see man's ability to produce and to interpret signs, as well as his ability to draw inferences, as representing a way that gives form to our experience (ibid.:13).

The following excerpts, from a small portion of Mrs. Wayne's total reading program, have been selected on this basis. They are examples of the way in which the pedagogical exchange between teacher and children gives form to that experience and, simultaneously, draws its meaning from the flux of that experience. The excerpts are taken from story-time during which Mrs. Wayne reads to the children from books she has specially chosen, and from U.S.S.R. (as uninterrupted sustained silent reading) during which children read books of their own choice.

Teacher As Pedagogical Guide in the Interpretation of Meaning from the Text

Since the meaning of any text depends on the child knowing the vocabulary used, one of the primary responsibilities of a teacher is to ensure that any new terminology is introduced to the children. This introduction has the connotations that derive from Latin: intro--within and ducere--to lead. It implies taking steps toward a formal acquaintance, a deliberate bringing in of new elements to establish new knowledge or to extend and enrich what is known about the word under consideration. While the process may have formal intentions, teachers do not need to make it a serious affair. As Mrs. Wayne demonstrates, there is frequently no recourse to the dictionary. The explanations for the "new words" come from the children themselves or from the teacher linking them to a recent and related experience. In a directed reading lesson centred on the children's readers, the word may appear in a series of exercises subsequent to its first introduction. In storytime, this is rarely necessary. The word arises from the context of the story and is returned to it.

> Mrs. Wayne: {reading to the children, then stops} If you have a log cabin and you chink the logs. C-h-i-n-k the logs, what do you do?
>
> Lindsey: You put mud between the cracks.
>
> Exactly! The logs would never really fit right together, would they? You could see through them. If you plaster it with mud between the cracks, you are ...?
>
> Chorus: Chinking!
>
> Right! When we talked about the pioneers earlier in the years, they always chinked their walls.

However, knowing the single word is not enough and the teacher reading stories to the children will periodically stop to clarify a point of meaning or to ensure that the children are making appropriate inferences from what they are listening to. In this case, the semiotic horizons of the idea are much broader and, for some children, more difficult to understand. Aware of this, Mrs. Wayne builds cues into her question and rereads a pertinent passage:

> Mrs. Wayne: Can you figure out what nationality Angus McNair is?... It is partly in his name and partly from what he says.
>
> {reads in a Scottish accent, as she had the first time through}) "You've come to see the North, me lad," he said. "I'm thinking you'll be in love with it before the month is out."....
>
> Chorus: Scottish!
> Irish!
>
> What makes you think it is Scottish? You are right!
>
> Andrew: What was he called again?

Shawn: The way he talked.

Me lad, right you are! His name is McNair. It's Scottish. Earlier he said...remember?..."Do ye not know me?"

Danny: I thought Scottish people spoke Scottish.

They speak English but with a Scottish accent like Angus McNair in our story. That just like the Irish. They speak English too but with an Irish accent. And people from Newfoundland speak English with an Newfoundland accent. And if you visited there, they would say you have a Western accent.

{Children giggle}

Danny: Really?!

It is evident that Angus McNair takes on new dimensions in his character that few children fully appreciated before. Mrs. Wayne's voice, reading in a Scottish accent, was previously entertaining. Now it is meaningful. From this point on, the story is richer because of this clarification. Each child brings whatever it is he knows of Scottish people and Scottish traditions. Lindsey, who takes highland dancing every Saturday morning and writes letters to her grandmother in Glasgow, obviously knows a great deal. Others may only remember pipers in a parade, a character on television speaking in the same accent, or the plaid-decorated mug on their neighbor's shelf. Some may have nothing in their memory to build on. They are introduced to "Scottish" for the first time. But now, they do have a lead. What is clear too is that this "aside" as an inferential aid is a natural part of story-telling. As Mrs. Wayne said later, "I take them with me into the story". This can only happen if, along the way, she clears the paths to meaning for them.

Story details are important too. If they are ignored or misunderstood, the context of the story suffers. Mrs. Wayne has an experienced sense of where, in the story she is reading, a pause is necessary to pull the threads together.

> Mrs. Wayne: {reading} Although the cabin was four hundred miles from civilization and two hundred miles from the nearest white man, Jimmy had not found it lonely. {pauses} Rob? How far away were they from civilization?
>
> Rob: {softly} ...a mile?...
>
> Pardon?
>
> A mile.
>
> {Giggles from children}
>
> Oh, it was more than a mile.
>
> Kathy: Two hundred miles!
>
> Because if you don't get those little details then the whole feeling of the book is lost. There is a lot of difference between four hundred miles from civilization and being a mile from civilization. They were in open Indian country so nobody that was close. {reads} Not twenty miles away was the band of Cree Indians.....

In addition, there are other aspects of interpretation that are critical to the children's understanding the story such as hyperbole, satire, play-on-words, plot lines, character profiles, an understanding of fable, fairy tale, myth, limerick, epic and so on. But understanding begins with the first story the child is told. Surprisingly early, the child learns to separate the real from the fantasy, the "tease" from the serious, and the profound from the trivial. As parents and teachers give semiotic nudges in the right direction by changes in their attitude, voice, posture, emphasis, and in the entire context they create for the story-telling experience, the child absorbs much of the ancient wisdom of this art.

Mrs. Wayne builds into her literature two additional components that lead the child from being a listener of stories to a reader and writer of stories.

> I try to include a real variety of books during the year. I usually only read The Lion, the Witch and the Wardrobe. But this time I decided to go on to The Magician's Nephew. You know how it is to read the end of the book. There is no more. But you want to see what happens next. So I thought by reading two of the series, I would encourage at least some of them to read the next five. The other thing is that there aren't that many series that are appropriate to read to the children at this stage.
>
> Last year, the grade fours wanted me to read The Lord of the Rings! But no way! That might be something they can pick up later on their own, but I just couldn't. It's hard enough for a university student to plow through the three of them. But I am giving them a good sampling with The Hobbit. It may not be appreciated until they actually, literally, fall over the book later on, but it will all come back to them.
>
> The next book I will read is Island of the Blue Dolphin. I love that one. It is completely different from what I am reading now. It is in first-person and it is based on a true story. I try to read a sampling of different types of books too. Since so many of the grade fours are into reading

> series on their own. I try to stretch their range too. Let me see: we are on our sixth book now. I'll probably read ten before June.
>
> One of my friends on staff teases me that my kids wouldn't dare not read. {laughing} I guess that's true enough. Because I encourage it all the time, in everything we do. All the time. Even if they are just reading their own stories. They devour those books. [referring to books compiled by the teacher of children's written stories and poems].
>
> I like to tie back to the author too. I greatly respect an author's talent, so I talk to them about how we got to know the characters and how the author has made them very believable.I'm hoping that it will relate, to a certain extent, to their own writing. That writing is not only creative, it is powerful. You can do things with words. And that it's exciting to try! At this grade level, it's simple things, of course, like if you use good adjectives and adverbs, you are going to develop your characters more and make your story more interesting.

As a pedagogical guide in the interpretation of the meaning of stories, a teacher in the elementary grades plays a critical role in introducing children to stories in a way that appeals to them and broadens their understanding. Whether by example or specific cueing, a sensitive teacher can give many a child far more than he is likely to find if left to choose all his books without suggestion and to read them entirely on his own. Obviously, encouraging the child to choose and read independently is the primary goal but, along the way to that destination, the insightful elaboration of word, phrase, and text helps make the journey more meaningful and therefore more rewarding.

> I think it is really important that literature is read for literature's sake. To enjoy it. Not to tear it apart. But if they enjoy it and you try to relate it as much as possible to their own writing and point out subtleties and details, they are going to understand that it is not just enjoyment but why and how the author is doing this for them. How he is making them feel this way and how they may be able to do the same thing with their own stories, either now or even ten years down the line. Writing is very powerful. The seed is planted.
>
> But it is important to do all this subtly. There is nothing worse than losing the whole, the emotion behind the story. The story is there to enjoy and not there to be picked apart. It was written in the first place to entertain.

Teacher as Catalyst in an Interpretive Experience

In the description above, Mrs. Wayne takes on a specific semiotic role and, through purposeful pedagogical pauses in the story-reading, strengthens the children's understanding of the story. Although it seldom is, much of that activity could be recorded in a lesson plan. It deals with vocabulary, details, inference, sequence and plot: the inner workings of the story. But there is something more that takes a story into the children's lives--the way in which the teacher reads the story. In this, the teacher becomes a catalyst creating for the child the ambience that leads to an whole new interpretive experience.

Kata--wholly, completely: and lyein--to loosen: from the Greek. A catalyst, then, is a substance that causes an increase in the rate of a chemical reaction and is not permanently altered by the reaction. Interesting possibilities. As a catalyst, the teacher is the medium through which an increase in the rate and quality of children's reaction to the story can occur. As will be evident in the following description of a story-reading experience, the teacher completely frees the children from the solidity of their lives in the classroom to explore the realms of the imagination. In Mrs. Wayne's case, it is extremely doubtful that she remains permanently unchanged by their reaction, or the children by hers.

For several weeks, Mrs. Wayne has being reading from The Trumpeter Swan. It is a book she has read to previous classes and enjoyed with them. The story-reading takes place in a corner of the classroom set aside as a reading corner. It is very attractive: an artificial waterfall gurgles pleasantly, plants line the top of the bookshelves, and there is a community of stuffed toys including E.T. and a cabbage-patch doll on the floor. There is a classroom library of two hundred or more books for the children to choose from, carpet remnants for them to sit on, and a teacher's low chair. It is the last day before the Winter Break, and Mrs. Wayne is coming to the end of the story.

> Mrs. Wayne: {reading} It was a noisy homecoming for the birds. Everyone wanted to say "Hello" at once.
>
> "Caw-caw-caw!" Louie's father made a graceful speech. Rather long but sincere.....(you all know how he speaks..) [Children smile and nod]...{in exaggerated oratory} "There's no place like home, sweet home..."

The direct and sudden shift of Mrs. Wayne's voice from the reading-teacher voice to the teacher-of-the-classroom voice shifts the children's attention from the story to their own classroom existence. "You all know how he speaks..." is a statement that confirms a number of things for the children. It is, first, a reference to a past experience that they have all shared and enjoyed during earlier readings from the story, i.e., knowledge of just how the father trumpeter swan does talk, incessantly and floridly.

Second, the comment from Mrs. Wayne includes the children in her experience of reading. "You all know..." functions as a nod of the head that brings the children's past experiences into the current experience. As they listen, they take part in the creation of a new experience that encompasses both their past and their present, "a thirdness" in Peircean terms that exists only because of preceding experiences.

As Mrs. Wayne continues her reading, she becomes more and more expressive and more and more animated, taking on the tones and accents of the bird characters of the story. Soon she becomes as totally absorbed in the story as the children are. She is, in effect, gradually putting aside (or even forgetting) her teacher-role and becoming pure story-teller. It is obvious from their response and from the expression on their faces that the children enjoy this tremendously. They forget that they are children implictly obliged to listen to their teacher reading. They become story-listeners fully captivated by the spectacle of a talented teacher-become-storyteller. They put aside their fragmented attention as they put aside the objects of play and the undercurrent interactions they had been creating between themselves. They and the teacher became the story.

The boundaries that have defined their status as pupils, and Mrs. Wayne's as teacher, are forgotten. Their silence is not just obedience. It is the silence of being completely enthralled. The characters in the book now live in the children's minds and the children live in the characters' world. Their time is the time of the story; their space is the space of the story. They are no longer children sitting on carpet remnants but children walking beside the characters --no, beside the people--in the story, seeing with their eyes, hearing with their ears, living their lives beside them. They are still outside the story (unless in their own minds they take on the persona of the character) but they are outsiders within the story.

> Mrs. Wayne: As I read, I like to think I take-them-along-with-me into the story. Later, I talk to the children about how we got to know the characters and how the author has made them very believable. We have become a part of this story, as if we know these people, and we are there.

That they remain physically within the classroom is no longer relevant. The children and the teacher have become the story. It is written on their faces, in their posture toward the book, in the light in their eyes, and in their forgetfulness of the ordinary things around them. All these things they have transcended, in the sense that they are no longer bound to the limits of the situation (to *trans*--go beyond, and *scandere*--to climb). They are independently and creatively taking their place within the story. The teacher's voice, following the author's words on the page, has allowed them to climb beyond the ordinary experience into one of extraordinary pleasure.

> I want to go *with* the feeling created in the book. I felt *so close* to the children when I was reading *Charlotte's Web*. It was just so emotional. Even though they couldn't necessarily see my goose-bumps, I was *with* them. And if you *do* cry, it's even more.... You really feel you are all one... When they are that quiet and that involved and that close, I can be myself.

In the terminology of semiotics, the teacher (the signifier) and the story (the signified) and the children (the interpreters) have become one. Yet it is not possible to transcribe fully all the dimensions of their experience. It lies flat on the page. In the moment of its occurrence, the experience is a living exchange--sequential and simultaneous, individual and group, adult and children, teacher and pupils, story-teller and story-listeners. Listening to the tape of the event gives the speech exchange; a video tape adds the physical components, but, somewhere in the moment of the experience between teacher and children, is the affective exuberance of a story well-read and fully appreciated.

> Mrs. Wayne: {reading} "Okay", said the judge.
> "Describe what happened."
> "He was flying like this." And he held out his hands and imitated the bird. "Pretty soon, there was this enormous bird and he was on the sidewalk and he was dead! And there was blood all over everything."
>
> {Children giggle as teacher's voice increases in volume and exaggeration}...
>
> "Did you notice anything special about the bird?" asked Judge.
> "Blood!"
> {more giggles from the children}
> "Anything else?"
> "Just blood!"
> {children giggle}
> "Thank you," said the Judge.
>
> {reading on} Just then the ambulance came down the street. "Whoo-whoo-whoo!" {mimicing its siren}. {Children giggle} Just then an ambulance came screaming down the street and two men jumped out. They took out a stretcher and set it down where the swan lay.
>
> The old swan shook his head...."I think I am coming to life!...I am reviving....I shall live!... {exaggerating the miracle}...I shall return on strong wings to the Great Sky. I shall slide gracefully again on the ponds of the world and hear the frogs, {children giggle} and take pleasure in the sounds of night and the coming of the day.

There is important dimension to the children's perceptions of their teacher at this point. Their giggles are as much for the image of her freeing herself from the conventional constraints of "teacher" as for the humour of the story. Now their teacher imitates the ambulance siren, the melodrama of the wounded bird recovering from his blow, the extravagance of his reclaiming life--her eyes are sparkling, her voice raises and falls in mimicry of the drama in the words on the page of the book she holds. She gestures as she never has in the classroom. She buoys the story into their imaginations. She is other than teacher of solemn instruction or repeated reprimands. She is other than the one who inches perfection into their work, who praises at one moment only to set higher goals the next. Now she is story-teller and all school connotations fall away.

This other person embedded in their teacher at once surprises and delights them. Is there a hint of slight embarrassment in their recurring giggles? A slight thrill at sensing her cross the stereotype image of teacher to become someone more spontaneous, more enclosed by the magic of the story? Do their amused glances to one another tell us that this is the person they most appreciate, this new Mrs. Wayne, uninhibited and giving?

In this rather comic re-personification of the teacher as story-teller, do we not see some of the potential joy of learning? Where what is shared is more important than the accoutrements of conventional lessons? Where the simple interrelationship of children and teacher is all that is really necessary for learning to occur? Or is it that learning is in disguise, hidden in the story and not accented by reasons, goals, obligations, explicit intentions or curriculum requirements? Can it be that learning can be pleasure? Or further, is it because neither children nor teacher in this context are even remotely concerned with educational goals and that, from this very indifference, comes the fruition of the best in all of them? The experience is not something they are supposed to be doing; it is something they are.

While one may question the educational value of the story-telling experience, ask for delineated objectives or interview children about their reactions to the experience, all this is not really necessary. There is, in the relationship between children and teacher, a singularity of being that supercedes external intentions. It is an expansion of the sense of communitas that Turner (1975,1979) writes of --a unity of persons inspired by their very involvement in the event, a coelescence of spirit.

> Mrs. Wayne: They become very involved too. When they see you get that involved, they become transformed. They are feeling the story with you. That is what is so beautiful, because when that happens and we become fused together, we can stay there for quite a while!

When one examines how this occurs, it becomes evident that the dialectical relationship is critical. A teacher. reading in full dramatic fervour, would only appear ridiculous if the children refused to come into the spirit of that exaggeration. Children, rollicking with laughter inspired by the words of the story, would soon cease that laughter if the teacher did not similarly show amusement and tolerance. A single look of mutual appreciation or of stern censure is all that is needed to enhance the potential enjoyment of the experience or freeze it in its first blooming.

Some children derive particular pleasure in following along with a copy of the book as Mrs. Wayne reads.

> [I notice you had your copy of The Hobbit while Mrs. Wayne was reading to the class.]
>
> > Danny: I like to follow along. Once in a while, I read ahead. It's okay, I have a bookmark where she is and where I am. I like doing that. Actually, it's excellent! You can go ahead and find out what's happened while everybody else is in suspense.
> >
> > Once we ordered the film of The Secret of Nimh and read the book and compared both of them. Actually they did compare well. But I liked the book best.

While there is an appeal of different modes expressing the original story, Danny suggests that the original source is preferable. It should be noted, however, that he is an exceptionally competent reader. He has explored other books by the same author as well as other thematically related books. He has the ability and confidence to enjoy reading. Danny can move imaginatively through the author's text. So it is especially for children who have not yet mastered the mechanics of reading that Mrs.Wayne reads, demonstrating the pleasure that comes from being able to read. In doing so, she gives them all access to books they would never know and to experiences they might not ever have. In this, children like Danny and Mark are important models too.

> Mrs. Wayne: A couple of years ago, I had a group of children in grade four. I read The Hobbit to them and we all loved it! Then, last year I got the most of the same kids again in grade six. And they wanted to hear it again, desperately. Now, there are places when the book really drags. It's true with any book but it is especially true for the Hobbit in patches.
>
> I'd be reading in one of those spots and Mark would go, "Oh, I know what is coming up!... Wait, you guys! This is really neat!" and they are all listening and I'd think "Thanks, Mark!
>
> It was great! And they loved it! Or he'd say about Gandalf "Oh, this part is really funny! Just wait!" He remembered a lot of it. So they were all intrigued right from the very beginning.

The children's responsiveness to Mrs. Wayne while she is reading a story is a valuable indicator of what the experience means to them. Mrs. Wayne is reading from The Lion, The Witch and the Wardrobe. In conversation, I observed:

[It was interesting to watch you through the camera lens. The whole interaction between you and the children seemed to get closer and closer. Even physically, they edged nearer and nearer. But it was more than that. There are some beautiful closeups of kids, virtually hypnotized, watching you. And then, when I thought about you, I saw the same thing happening to you. You started to reading the story as a teacher-reading-a-story...]

Mrs. Wayne: That's right. Then I got involved in the story. If they are quiet and growing intense, I can really put into it. At first, I am so distracted because they are wiggling so much. It's just words to me: I'm watching this going on and that and I'm trying to watch the book too. It really bothers me! I tell them that but they just never seem to sit down and listen. It just doesn't happen that way. It takes a while to lead them into the story. Especially in the story today. There were so many good parts! You can lower your voice or whisper just as it is happening. Or saying the words in a special way and then stopping...

[It was very effective! I couldn't possibly catch it all on camera, but I certainly felt that intensity.]

I do get involved when I'm reading to the kids. The Island of the Blue Dolphin is a real favorite of mine. A couple of years ago - it sounds so silly but - there's one part where I cried so hard and I didn't I feel could handle it. I called a sub that day so I wouldn't have to read it! {Laughing} Oh, isn't that awful? I had read the book about five times before and every time I'd keep telling myself "I won't cry!" But I get so involved in it, I do. And The Bridge to Teribethia....the first time I read that...

And yet, I don't think there is anything wrong with that. It's a human emotion. I've had classes where I'd look up from the book and I'd see their tears running down their cheeks. Four or five with tears and most of them with their eyes brimming.

It's hard. So usually on the first book like this, I do warn them.

[What are you protecting them from?]

> I don't know. Sometimes, I just say, "This always happens." Just to let them know that it is okay! If you want to cry too, go ahead. It happens to me. Maybe that's part of it too and so I don't get kids laughing and being silly about it.
>
> [You don't want the mood destroyed?]
>
> Oh no! I want to go with the feeling created in the book.
>
> [Can I try something like: Have you put your teacher-mask down?]
>
> (Pause)...Maybe?...(Pause)...Maybe that's it. But maybe they've thrown their masks down too.

The "putting-down-of-masks" may be a critical insight in understanding the pedagogical act. Both teacher and child put down any facade that defines them other than themselves. The demarcation between "teacher" and "pupil" is softened, if not abandoned. Over and over again, Mrs. Wayne says, "I can be myself.", as if the imposition of all her teacher-roles is as heavy as burden on her as it can be for the children. In this intimate reading, she can express what she is, what she believes in, what she values. The children too put their masks down. Throw their masks down--a gesture of impatience and relief? Now they do not have to preserve the facade of being "good" or "bad" that so many other educational situations inspire in them. They simply are. Pedagogical implications are far reaching.

> Mrs. Wayne: Imagine what good spellers they could be if they ever became as completely involved in a spelling lesson! (Laughs) I don't think you ever could do it in spelling! How exciting can you make it to spell this word! In spelling, I'm more likely

to make a quip or be sarcastic. I leave the emotional end completely. I'd give them a silly sentence to go with it. It is a much lighter exchange.

[Another idea occurs to me: spelling is a classic example of pieces of information, very fragmented as opposed to the continuity of a story.

That's right! In a story, everything is involved. Your listening, your thinking, your feeling, your visual imagining, whereas spelling is so cognitive. Reading a story, you are getting the whole affective side of it. That's where the power is and the strength!

***

[This afternoon, I don't know whether you intended to stop reading, but you said...]

{laughs} I was going to! {Leans forward and speaks very slowly} "Do - you - really - want - me - to - read- a - little - more?" Then I whispered: "Be really quiet!"

[So what if on the planbook it says: Read one chapter!]

{Both laughing!}

In my mind, it said: Read until twenty after and try to stop at an appropriate time!

[Ah-ha! There are signals underneath! And of course, they were right onto you. They just begged: "Don't stop! Don't stop!" That was just really beautiful! That's what every storytime should be!]

The description of storytime may hold a key to what good pedagogical interaction can be about. Although in this particular kind of experience, the children are listeners rather than active participants as they might have been in a teacher-pupil exchange lesson, they are active within themselves. With their teacher, they experience echoes of the poignant experiences created by the author of the book they are sharing. They go together into the story, awakening from their own experience those memories and associations that arise from the authenticity of the author's words. Paradoxically, while individually they each draw from their own well of experience and emotion (their own designatum), they move together through a range of human emotions that draws them emotionally closer. As Mrs. Wayne emphasizes, not all lessons can take on this dimension. But it is a loss, greater that can be measured, when such experiences are rare in the children's lives.

It is almost a disservice to Mrs. Wayne to continue the discussion. The moment she created with the children and "the trumpeter swan" is rich. The experience is delightfully humourous and meaningful, for are not the frailities of Grandfather Swan ours too? (Although the children need not know this yet). The occasion is rare enough in our classrooms to be treasured.

But a teacher's power as catalyst is not infallible. The following example is the one a few negative experiences for the children that I witnessed during five different story-reading sessions from September to January. I very strongly suspect that Mrs. Wayne did not recognized the semiotic precipice she was creating.

Mrs. Wayne: I would like you to join me at the back for a new story. Come back very, very quietly.

> Chorus: Hurrah! {They hurry back and sit in a circle around the teacher's chair.}

This author one of my favorite authors. He has written two about the Arctic. I think the librarian showed you the model of the kayak.

> {General agreement}

This book is about the Arctic as well. I thought it was a good time to be reading it since it is so cold out now. Although you could, of course, read it any time. I will give you a few clues. The book has a real sense of adventure. It is about two boys who get lost in the frozen Arctic. You will also learn a good deal about survival.

> Brian: Do you mean surviving when people are chasing after them, like on TV?

No, I am thinking about if you were caught out in the cold...if you were lost in the woods or something and couldn't find your way out.

> Matthew: Like in the summer, we were playing war games and we went into the forest and everything. And we had camouflage and knives and everything and these guys came after us and we had to hide.

Well, this is a little difference. It is about a fight against the weather not against people... Let's get started then. It is a much more serious book than the other one.

> Adele: (groans) Ah-h...

It takes a little while to get into it but once you are into it, you really want to find out what is going to happen. So if you listen very quietly... The first chapter is called, "C.J. and the Lost Team". There are two boys: one is a white boy and one is an Indian boy. Which name do you think is the Indian boy's name: Awasoo and Jimmy?

> Danny: I think Awasoo will be safer because he knows the woods better.

Well, we will find out... I'm ready to start...if everybody else is. {very softly} Otherwise I will have to put the book away...

{General shuffling and clearing of throats. Attention-pose}

{reading} The month of June was growing old. It had been a year since Jimmy* McNair had left Toronto, the city of his birth to take up a new life in the sub-Arctic forest in Northern Canada. Beside the shores of the lake, the tarmaracks were green now after the winter's blackness. Out on the lake, great loons cried shrilly....

{stops because Matthew and Jimmy begin whispering, speaks softly} Matthew, I think you both would enjoy this because you like the outdoors. {resumes reading} As Jimmy stood in front of the log cabin, helping his Uncle Bill bail his catch of furs, he tried to remember how he felt on that day, a year and a half, when he had climbed out of the plane at a town called La Pas to meet his uncle....

{looks up sternly} I will not put up with talking... That's the last warning.

Matthew: {protesting} I'm not talking.

Jimmy, and whoever else, sit still and quit playing... Okay....{reads} Jimmy's uncle, Angus, had been a sailor, master of a sealing schooner in the Bering Sea.......{continues reading}.....

There is considerable semiotic irony in this situation. Mrs. Wayne makes no reference to the fact that the boy is the story has the same name as a boy in the classroom. Yet it is just this fact that creates the surreptitious conversation between the classroom Jimmy and his friend. Because of this, what is called a discipline problem occurs and recurs during the attempted reading.

---

*The name of the boy in the story has been changed to match the pseudonym given to the boy in the classroom. In the original version, the boy is called Jamie.

But it is a singular occurrence for a storybook character to have your name or you to have theirs. The "Jimmy" sitting in the listening circle immediately becomes an icon for the boy in the story. Certainly in his own mind and in the minds of his friends, Jimmy takes on the identity or rather gives identity to the storybook Jimmy. This must be commented upon and enjoyed. But Mrs. Wayne gives no indication that she appreciates this coincidence. So it is that, with or without her acquiesence, the storybook-Jimmy becomes an index, a sign that draws the classroom-Jimmy into the story. This points to the possibility of his taking part in the story's adventure, of his being alive in that story.

This duality, this phenomenon of the Jimmy-in-the-classroom and the Jimmy-in-the-story interacting with one another is surprising and exciting. The children glance at each other to ensure that the identical name coincidence is noticed by everyone in the classroom. In doing this, they create an undercurrent of conversational urgency that interrupts Mrs. Wayne's reading. But who can blame them for the attempt? While children (and adults too), often identify themselves with a character in the story they are reading, the sharing of name and characteristics is rare indeed.

From a research point of view, it is important to note that the implication of the name similarity did not surface until a replaying of the audio tape much later. Because of this, there has been no opportunity to ask Mrs. Wayne about her skirting the issue. It may be that her explanation would have been a simple as mine just given: it was not noticed at the time. Rather, she was absorbed in the fullest of her intent to introduce the story and begin reading it to her class. On the other hand, what appears to have been an omission may have been a deliberate avoidance by her, i.e., not giving any preferential recognition to Jimmy. What now appears to have been an inevitable comment to have made, was not made, and that omission brought its own consequences.

There is no judgment intended. This is simply an illustration that serves two purposes. First, to show just how powerful a name is. The character is the story has _my_ name. Does everyone notice? Second, (and related to the pedagogical relationship between Mrs. Wayne and the children) from the children's point of view, their misbehavior is perfectly understandable. It may also follow that, because they sense that their teacher does not recognize its importance, they feel a sense of injustice that draws their attention away from the very story with which they had been establishing a highly personalized relationship.

If this relationship had been articulated by Mrs. Wayne, the experience may have become a powerful motivation for the boys. Instead, they are reprimanded and become absorbed in the aura of censure rather than living happily and vicariously in the story. Whether this is too strong a case to be made cannot be determined. It is, at least, a possible consideration of the dynamics that had occurred. As such, it provides another interpretation of the importance of the sensitive semiotic conditions of interrelationships that ride under a teacher's voice, and which, for the children, are as important as the story.

The teacher, as catalyst, assumes a complex and multiple role: teacher to children, teacher to child, story-reader to children, story-reader to child, story-reader to story, and story-reader to the blend of all of these. The simultaneous semiotics of children, story, and teacher make the act--the _art_ of reading a story--an extremely challenging one, and one that separates the excellent story-reader from all others.

Children As Affected by Sign Saturation

As desirable as experiences with literature can be, they can be used too frequently or too long and, consequently, lose their impact on the children. The model of the teacher reading and recreating different and exciting worlds for the children has many pedagogical values. By giving the words created by authors fluency and expression, she illuminates their meaning. She adds her own interpretation and sensitivity to the act. She draws the children in with her, and together they share the experience, a new experience. For the children, the values are many. They are introduced to excellent writing, to powerful images, and to new understandings of the world and the people in it. They learn that time is very fluid in books: the past, the imaginary, the futuristic, and the present are all accessible. They experience the factual, the speculative, the creative, even the dogmatic. They are given raw materials (words, resonances, and ideas) to use semiotically, to think with: to understand, to compare, to evaluate, and value.

But, in all of this, they are recepients. The teacher reads. They do not. The teacher makes the choice. They do not. The teacher sets the time and place of the experience. They do not.

> Mrs. Wayne: Most of you remembered to come in quietly for story-time. {referring to the children in a casual circle around her feet} You're a little bit too far away still.
>
> > [Much wiggling, coughing, settling in by children.]
>
> I'd like to get started but we're still waiting... Good. {Begins reading} "Kim and Nicodemus were down at the shore. "Is it noon?" asked Nicodemus. In the artificial light, it is hard to tell the time."... "Did he tell you about the toy tinker?"

{Reads a considerable length of the story uninterrupted.} "The next chapter is called the Toy Tinker. We probably won't have time to finish it." {Reads.} That's all we can read today. Quietly now, back to your seats for your own reading time.

***

[Children get up, jostling each other, chatting. Several girls chanting a skipping rhyme softly.]

Mrs. Wayne: I see Tony reading already.

[Children chattering continues.]

Carmen has her book out.

[Chattering gradually subsides as more and more children are settled in their desks with free-reading book choices.]

All talking should be finished now. Everybody's reading.

[Few youngsters not yet settled speed up their efforts.]

Danny: Mrs. Wayne? Can I get another book from the library?

[She deliberately ignores him. Free-reading choices were to have been selected earlier.]

Danny: Mrs. Wayne? Can I get another book from the library?

[She nods to him with a quick turn of her head. He goes quickly and returns.]

Mrs. Wayne: I would like to see everybody reading.

{Goes to Jimmy's desk and whispers to him.} Everybody is reading. {Opens his book and taps it. Jimmy brushes his hair out of his eyes. Takes the book in his hands. Slouching down low in his desk and reads.}

{Mrs. Wayne moves slowly up and down the aisles, checking that each child has a book and is settled.}

The rationale in having the children read after the teacher has read aloud to them is sound. Her demonstration is to attract them to reading. As Mrs. Wayne does, many teachers publicly acknowledge children who quickly take up the suggestion to read on their own. These children represent the attainment of her intentions. However, some children do not find this linkage appropriate. After sitting so long, they want to move. After listening so long, they want to speak. After hearing the teacher read so well, those who cannot, readily see the gap between what is possible for her and impossible for them. As Jimmy shows us in all his being, he does not want to read. Not now. And not very much at any time.

For a number of children, this saturation of reading time seems to negate the original purposes as described by Mrs. Wayne in her interviews: to present a model of reading that the children might emulate, to expose the children to Canadian and international literature as a positive and enriching experience, and to create an occasion wherein a close relationship might be developed between the teacher and the children. These and other motives are completely within the curriculum objectives, and many times are achieved insofar as the children are obviously attentive, interested, and responsive.

However, when listening-to-the-teacher-read is extended to more than approximately twenty minutes, a restlessness in the children becomes increasingly apparent. This then precipitates a variety of correcting actions by the teacher until the proportion of reading time to correcting time is inverted. The longer the session continues, the less actual time is spent by the teacher in reading. The more she breaks the rhythm of the story, the fewer the children listen.

Two things occur simultaneously. The less the teacher reads, the more the children are bothered by the disjointedness of the story. The more the teacher reprimands the transgressors, the less they are inclined to listen. Consequently, they interact more with one another, causing still further disturbances. These, of course, trigger other interruptions in the story reading, and the whole experience disintegrates into a tug-of-wills over what will occur during this time. It appears that the implicit command that the children sit still and listen attentively for a prolonged period of time leads to their subtle and not so subtle rebellion. They assume a posture of shutting-down their will-to-listen, replacing it by a-will-to-prove-their-own-autonomy.

Underlying all this may be a significant feature related to semiotic exchanges. When we speak of attention, attending behavior, or a child's concentration on task, we may be overlooking something crucial to the whole interaction. It may be that the children become saturated with signs and the ripples of meaning that these signs create. Where the linkage is made into the story, the children can listen longer though not indefinitely.

Children abandon listening for many reasons: the child's disinterest in the topic or his inability to fully understand what is occurring in the story, the predominance of personal thoughts, or his priority of interacting with others. Where the linkage has not been secured, the language is heard only in fragmented segments. Comprehension is then but a random clusters of half-formed ideas that are not and cannot be built into a totality of meaning or interest. This may be analogous to the shifting of channels on a television set. A little sense is derived from each brief scene but not enough to sustain a curiosity to search for and receive subsequent meanings.

On the basis of these examples, it is possible to speculate that when children receive a surfeit of semiotic input from their teacher, they are powerfully motivated to create their own semiotic exchanges. This they may do openly or with whatever subterfuge necessary. If the content of the story does not provide them with cues for understanding, and if they are thwarted in commenting on words and sentences that strike particular chords for them, they readily draw upon their own experiences and those things that are more important to them. It is intriguing to speculate: Is there not a limited tolerance for absorbing signs created and conveyed by others? Is this tolerance linked to maturity? To self-image? To interest? To the willingness to endure? To the lack of alternatives? And how does this affect the interaction between teacher and children? How are we to know? There are few answers, but many inquiries might be made into why and under what conditions children learn.

To conclude with one last scenario: After an extended story-reading time, the children are directed back to their desks. Mrs. Wayne says, "There are four minutes left for your own silent reading." The class, as a whole, groans. Are they supersaturated with listening-and-sitting-still, and now they are required to sit-still-again-and-read? Too much of a mirror-image of what they have just experienced? The richness of the experience (for many were interested and attentive) has been drained. The joy with which they normally greet their free reading time is dispersed.

Or is there another meaning to their soft protest? Do those who enjoy reading independently feel cheated? Do those who were coaxed or coerced into reading feel unjustly treated? "Now I am doing what you want and I have to stop."

For all of them, their time is pitifully short in comparison to what they now see as teacher-time. Ultimately and devastatingly: "If I just start reading and you tell me to quit, why should I even start?" Paradoxically, Mrs. Wayne has first given them too much and, now, too little.

Story-reading time is frequently seen as incidental to the main curriculum, a time away from the rigors of learning basic skills. It is seen as a time of ease, of nicety and casual-togetherness. An interlude. It is all these things. But it is significantly more. Children have much to gain from a "good" experience while they listen to their teacher reading to them. It is a gift that she gives. But it also more than a novelty.

Two major contributions that a teacher can make during the story-reading experience have been described. Both are equally important: teacher as pedagogical guide in the interpretation of the meaning of the text, and teacher as a catalyst in the interpretive experience. A cautionary tale was included that points to the risks of over-saturating the children with a too intensive or too prolonged story-listening or book-reading activity. As in many things, moderation seems to be the wiser route. Semiotic input should be balanced with the child's capacity to benefit from the experience. It should stop just short of the delicate boundary between intrigue and boredom. Skilled writers do not use cliff-hangers at the end of each chapter without purpose. Teachers could more frequently do the same.

For reading to be a shared experience, there must be an interplay between the semiotics of experience conveyed by the text through an author's words and the semiotics of the reader's (or listener's) experience. The point where these converge into understanding is where the experience becomes a meaningful one. As much as teachers are eager to create situations in which that reading becomes a significant experience for the child, part of their intention and their planning must include the children as active participants in both the creation of experience and in the meaning derived from it. The richness that comes from reading comes as much from an internal interplay of human emotions, ideas, and reflection as from the signs on the page. It is the linkage from one person to another through the medium of sign--the interpretant--that makes that extension of experience possible. It is this that lifts reading from being a mechanical processing of signs to an exciting exploration of life's meaning. In this, a teacher's role as pedagogical guide and interpretive catalyst is invaluable.

The Significance of the Semiotics of Pedagogy

Although the possibilities are by no means exhausted, I have come to an end of "reading" of the semiotics of an elementary classroom. As creators of the signs that I have read, Mrs. Wayne, the other teachers, and their classes have given forth "signs" as meaning-carriers in their language, behavior, and attitude that have formed the basis for three major themes reflecting the semiotics of the classroom: spatial, relational, and pedagogical. These signs were interpreted in the context of the classroom and in the light of whatever understanding I could derive of their life there. In many cases, that interpretation was explicitly given by the teacher or by the children. In others, the interpretation is "drawn from" their signs much in the way that water is drawn from a well. It is there, but not necessarily accessible until some external effort brings it forth.

In a sense, the semiotic cycle has been completed as foreshadowed by the design of Pelc's Semiotic Quadrangle (infra:31): the background of the creators of the signs, the signs themselves, the context in which those signs were used, their intentionality (as much as this could be determined), and their implied meaning have been explored. Teachers and children have long since gone on with their lives, gone on to other and varied semiotic experiences, on to new meanings and new relationships. And yet, the semiotic cycle is not complete for those of us who, as outsiders, now look upon their semiotic experiences recorded here as text.

What is it that we have come to after this lengthy sojourn into "the captured events" and "discernible moments" of the September-May life of a grade four classroom? What is it we are to understand more clearly about the pedagogical process? What is it we hold in this written form?

> Art is intuition, or
> a feeling locked in an image, or
> a particular theoretical moment
> of the Spirit.
>
> (Rossi-Landi 1983:61, citing
> Benedetto Croce)

What has taking "a particular theoretical moment"--a semiotic exploration of the semiotics of an elementary classroom--added to our understanding of "What it means to be a semiotic being in the classroom?" and "How does a classroom mean?" How do we move from this reading to become better educators? In part, that answer is already given. It is what you as reader have already taken from the examples and interpretations placed before you. This is the semiotic nature of learning. It is what you, reader of these signs, take from what is given, what you experience. All I can do now is simply tie some of the threads of the pedagogical tapestry I have woven into "holding knots" so that they will not slip away too quickly.

So it is that in coming to some form of synthesis of the semiotics of pedagogy, there are a number of horizontal semiotic bands as "woof" that weave in and through the "warp" or single vertical bands that have been designated as spatial, relational, and pedagogical semiotics. These unifying threads are what make teaching "teaching", whatever the subject matter, or whatever the age of the learner (or teacher). They are the threads of pedagogy that lead to a unity of pedagogical purpose and achievement.

Pelc's Semiotic Quadrangle as a Guide for Interpreting The Semiotics of Pedagogy

Beginning with the creators of sign, it is clear that what the children bring to the pedagogical experience must play a recognized and recognizable role in that experience. To "begin where the children are" is implicit in most methodological advice. But it is important to know that "where the children are" is implicitly given to teachers by the signs that children emanate during every moment of their lives in the classroom. The signs, given in what the children say and do and in what they do not say and do, help place each child as receptive to learning or not, as "ready" or not to learn (in terms of having a sufficient and appropriate sign repertoire from which to move into new understandings), as "willing" or not to become involved in the learning process, and as perceiving (rightly or wrongly) whether or not there are openings for their participation and involvement in the learning experience. While much of this information is implicitly absorbed by the teacher, a more deliberate astuteness and a more explicit "reading" of these signs may well lead to a greater appreciation of children's pedagogical needs. As much as the signs--the semiotics of children--tell the teacher where the children are, they tell her how the journey beyond that point is progressing, and with what success.

The semiotics of each child also lead the teacher to understand the kind of child she is responsible for, to understand the personality of each child as embedded in the way in which the child conducts himself in relationship to other children and to her. That personality, with all its multiple components, may or may not create a viable affinity with the teacher. The reasons for this are as complex as the children themselves. But there are "favorite" children and less favored ones, those who can call on a teacher's understanding and patience and those who only provoke her. Although teachers seldom have time to reflect on them, the semiotics of relationships do exist. A teacher's reflection on this may serve the children better than any generalized action on her part.

The semiotics of the child's attitude toward pedagogy is another area of importance, influencing as it does the teacher's expectations, acceptance, and pedagogical nurturing of that child. Generally, teachers have far greater tolerance for children who put effort into their school work and show some independence and responsibility for their own actions. The sign of a child who is "not trying" alienates the teacher long before the one who, though less able, is "trying". There appears to be an underlying but very important semiotic of a child's gradual mastery of self-governance and independent achievement that is highly valued by teachers. If there is no "sign" of progress, it is not only the child who is thwarted; it is a reflection, in turn, upon the teacher who has not achieved the pedagogical goals that guide their being together in a common undertaking.

The semiotics of a child also give the teacher access to the kind and quantity of knowledge that the child is able to learn, has learned, and can be expected to learn. These signs can be as motivating to the teacher as they can be demoralizing. A large class of children with diverse interests, abilities, and intentions is a formidable semiotic display. Out of sheer expediency, a teacher may neutralizing these signs into a manageable (if not cohesive) cluster and generalize instruction to a hypothetical norm. It requires particular skill and sensitivity to recognize, tolerate, and accommodate to the multiple signs that the children emanate in their call for individualized pedagogical direction, support, and recognition. Each child is a sign unto himself, and all his actions stem from his own "functional needs", his need for acceptance, recognition, encouragement, and instruction. Each child reaches to the adult (teacher) for a welcoming hand. How a teacher should greet each child in the way that that particular child most needs is an unending challenge.

It is easy to understand this needing gesture from the child in its affective sense; it is less clearly understood that the child also reaches out in a pedagogical need--in a need to learn--to continue the innate curiosity that is part of his intellectual legacy. Difficulties compound themselves: the teacher must assess "where the child is", what the child knows, and what the child does not know. But in the flux of a brief pedagogical exchange with his teacher, how is the child to tell the teacher what he knows and what he does not know? Tony's "sumac red maple" (infra:495) and Roxanne's "mattock" experience (infra:555) suggest that, if they occur at all, these signs are subtle and quick. The teacher must look to the totality of the child, not only to what he says and does, to discern and identify his moments of confusion or uncertainty.

The semiotics of interpersonal relationships are as important as the semiotics of the pedagogical act itself.

Just as the child has an extensive repertoire of language in which to express himself, he has a multiplicity of sign systems through which his meaning is given. The way he moves, pauses, begins, stops, turns, waits, frowns, sighs, gestures, walks, picks up his book, speaks to his friend, enters the classroom, joins others at recess, approaches the teacher (or does not do any of these) are all part of the ways in which he can make himself understood. What is important is that so few of these signs are explicitly tied to a given meaning. They take on meaning only in the context of the child's life, and only with the full designatum that leads the child to act as he does at any given moment. No one can "read" the meaning the child "gives" in this way in its entirety, not even the child. But in all these ways and more, the child "speaks" of himself and implicitly asks that the teacher be sensitive to what he means and, more, understand why.

Considerable discussion earlier focused on the complexities of the child's life outside the classroom that might affect his performance within. While many teachers are aware of and concerned about the magnitude of problems some children face, they are also aware that their main task is in teaching the children how to learn. Clearing aside the weight of some of these problems is more than a teacher can do. As much as the totality of the child's semiosis is relevant to the child's intellectual growth, it may be that a single emphasis on learning is the best service a teacher can give.

One further point in reference to the creators of the signs that teachers are expected to understand: because of the multi-layered sign systems that evolve from a child and because these are constantly in creation, change, and diminuation, teachers gain most by periodically taking a panoramic semiotic-reading of a child rather than by attempting to create a permanent profile of the child. While for administrative purposes, it does become necessary to consolidate a child's achievement in terms of marks along a designated timeline, it must be remembered that the child's evolving in semiosis does not necessarily peak at these points, and that the "image" created, implied, and "read" into these marks by significant others is a very potent one. It is particularly important that it be understood that the marks reflect a child's past and not necessarily his future.

While it is difficult to envisage teachers finding time to speak freqently on a personal level with their students about their interpretation of what is happening in the classroom as it affects them, the conversations I have been privileged to have with the children suggest very strongly that they have clear and accurate perceptions that might well be shared with their teachers. Despite apparently differing interpretations of some of their behaviors, they too are concerned about their learning and about their success in school. It would appear there is much to be gained if a dialectical dialogue were possible between child and teacher as a matter of course rather than at a point of crisis.

The Semiotics of the Pedagogical Process

Both teacher and child begin the pedagogical relationship with their own designatum. The teacher comes from an adult life, trained as "teacher" with personal interests, aptitudes, and expectations for what will occur in the classroom. The child comes as child, experienced as "student" in the formal sense only to the degree that he has attended a structured learning situation before. He comes with personal interests, aptitudes, and expectations of what will occur or "happen" to him in the classroom, and a vast ambiguity beyond what he thinks he understands about school. He brings within him all that he has learned...and waits for the teacher to "sign" the next move.

Where the teacher is able to merge what she is teaching with what he knows, he will learn. His semiosis will converge with the new and become more. If such a linkage is not made, he may learn only fragments of meaning, unrelated and ultimately lost. Where the teacher's signs can link into his, they will carry him forward into new meaning. Where they do not link, they fall aside. If learning is to occur, at some point there must be a confluence of the child's understanding and the teacher's pedagogy, of the child's designatum and sign, and the teacher's designatum, sign, and interpretant.

The child's interpretant of the experience depends on the teacher's creating a critical linkage--sign to sign--in such a way that, for the child, a discernible moment occurs, a moment when he knows he is learning. The awareness of semiosis is as important for learning as is participating in the process. The learning must become part of the child's functional circle, a part of himself, before he can apply it in the situational circle with others. This means that he does more than "take" the knowledge; he must, figuratively, feel its weight in the palm of his hand. He must know that he now has that knowledge accessible for his own use. At least indirectly, he must be cognizant of the fact that he has a unit of meaning of some significance, of some value.

Until the child consolidates his designatum of the sign, the sign itself, and its interpretant as a total meaning in the context of his life at that moment, he can not come to a sense of what the semiotic experience means. While Peirce repeatedly insists on the inseparability of representamen-object-interpretant, it does seem entirely possible that pedagogy can stop at the edge of the interpretant, i.e., before a full understanding is achieved. If that fullness-of-understanding is to be achieved, the child must be a active participant in the creation of that knowing.

The only external measure of the success of such an experience is the child's ability to incorporate that learning into his own semiosis and, in some semiotic form, show his understanding. Traditionally, that evidence must be presented in a written format. But, as Suhor (1984) suggests, from the vast possibilities of semiotic exchanges, surely there are other ways, i.e., verse, dance, mime, display, debate, petitions, journals, cartoons, drawings, plays, logical challenges, anthologies, thematic bibliographies, annotated reading lists, maps, charts, graphs, videotapes, etc. in which learning can be expressed. The semiotics of pedagogy must include a variety of semiotic options to reflect, at least in part, the multiple ways in which children learn and share with others what they have learned. Limiting children's expression of meaning to narrow and confined forms leads only to semiotic stagnation and boredom.

Ironically, although as educators we would protest that we do teach the children how to think--to encompass the interpretant, as it were--"thinking" never appears on the teaching schedule either as a teacher's instructional time or as a children's activity. Yet, it is repeatedly implied in the prime objectives of any curricula. The very implicitness under which "thinking" is hidden suggests that it has no sign of its own, no identity as a legitimate pedagogical experience. But it is the most fundamental missing-link in a child's learning, and requires a time, an interlude of silence, in which it can occur. Thinking, as a time of internal semiosis, is commonly only incidental to the deluge of activities that are time-slotted during a school day. But it is just in thinking that the child explores ideas, enriches them, or discards them. It is a time when the child takes the ideas the teacher has brought forward and "tries them on" in his own semiotic contexts. In doing this, he completes semiosis. Learning becomes a part of him not a periphery.

Paradoxically, school days are sign-saturated...by the teacher. The children's involvement is often only that of a Greek chorus, repetitively chanting given phrases, rather than that of a creator "playing" with ideas, words, gesture, and whole range of semiotic possibilities. In order to do this, private thinking time must be part of the day's pedagogical program. If he is to learn, where is the child to start but from his own designatum? How is he to learn, if not by creating his own signs from what he has learned from others and from what his own mind creates when given the opportunity? Learning to learn is not an externally-visible and imposed process but an complex, evolving, and highly personalized one.

Pedagogy, then, is a process of accruement, a semiotic growing, an expansion of knowing and self. It is a highly intersubjective process whereby the teacher knows or "senses" the moment when information or cueing is relevant and when it is not, when "giving" is required or when waiting is wiser, when listening is more valuable than speaking, and when extending and consolidating is more relevant than "letting be". Pedagogy is a continual and deliberate shifting from the teacher to the learner to ensure that the "jump of meaning" is well-placed. This does not, by any means, imply a predictably regulated semiotic see-saw but something much more discrete. There are times when it is most appropriate that the teacher teaches at length and without interruption, to present a whole semiotic pattern of meaning. But in that presentation is a teacher's awareness of whether the learners are "going along with" her and whether she must adapt how and what information is presented. In every sense, pedagogy is a collective act, a semiotic exchange of content and its form.

Pedagogy Interpreted By Peirce's Function of Signs

Peirce's three variations of interpretant form a useful basis for suggesting how a teacher successfully makes a critical semiotic linkage with the learner. The emotional interpretant, for example, is a primary key: the learner's sign of recognition, awareness, or understanding, or lack of it. While some learners may maintain a neutral gaze and posture, others do not. Their understanding or lack of it is "written all over them" and serves as a sign for continuance or modification. The energetic interpretant too gives a "reading" of the degree of understanding that has been achieved during the pedagogical exchange. It is the act that is produced by the sign and, in the classroom, would be reflected in the activities that the children were able to complete or initiate independently. There is, however, the assumption that the selected activities are relevant to the topic and to the interests and abilities of the children, and that they offer sufficient scope for the children to indicate what they have learned. The logical interpretant may well offer a final assessment of learning effectiveness insofar as the children would, in some symbolic form, demonstrate their learning. This pedagogical evidence is external but, in large group situations, is one of the few ways of "collecting" learning for confirmation.

If we use Peirce's notion of "firstness", "secondness", and "thirdness", it is possible to see the pedagogical process as related to Uexkull's functional and situational circle. For example, in the semiotics of space, "firstness" implies that the child has a space of his own--his desk as a private area. It is his epicenter and, ideally although not realistically, he has freedom of movement within that area. Other than bodily adjustments, that freedom does not exist. "Secondness", in spatial terms, suggests that the child within the classroom is governed by teacher-particular rules that regulate his use of space around the classroom. That movement is associated with "gradeness" and the teacher's personal decisions about classroom mobility. "Thirdness" suggests the child's use of space is limited not only by his teacher but also by the rules of the school as they apply to the classroom and to the child's movement about the school and playground. As in the semiotics of relationships, spatial semiotics in "thirdness" subvert individuality for the common good. Group-context is the governing condition.

The child's awareness and use of spatial semiotics may tie in closely with his preference as a learner, i.e., whether he prefers to do his academic work alone, with a selected number of others, or in the context of the whole class. His personal spatial semiotics will be depend upon (and be in conjunction with) the priority he gives to pedagogical matters over personal ones, and on the range of possibilities the teacher offers at any given point. For some children, there is no conflict between what they, as individuals, prefer in terms of spatial-relational semiotics and what their teacher permits. Their functional needs merge with the situational context. For others, the tug-of-war between self and teacher is evident in their response to spatial semiotics as well as in their relational and pedagogical semiosis. For these children, there is a definite disjuncture between their functional needs and the teacher's situational requirements. "Where" and "how" they are to be engaged in pedagogical exchanges may become the first point of difference between them.

In a pedagogical-relational sense, "firstness" is the child alone learning with a spontaneity that arises from his own interests and the availability of content to be learned. He is an independent learner, "an island of self". He creates and uses signs as he is attracted to them and as they serve his purpose, whatever that might be. As a learner, he is self-governing, self-motivating, and self-responsible. There are usually relatively few opportunities for a child to function within such "firstness" in a classroom. However, it is interesting to speculate on what might evolve if children were given more opportunities for self-direction and self-pacing in their own learning.

In "secondness", the child is learning in association with another: a teacher or a co-learner. Here, if there is an equal status accepted between the two, a dialectical dialogue is possible. Here, there is the time and opportunity to work through ideas, to explore possibilities, to contrast and compare, to evaluate and reconsider, to create meaning with language and in nonverbal forms. There can be an intimate use and sharing of many subtle sign systems that are not easily given nor recognized in larger groups. There is an immediacy of communicating and responding, and a fine atunement one to the other, a sensitivity of nuances, and a mutual coming-to-meaning.

It is just this interrelational exchange of meaning that Uexkull describes as "symbiosis", the merging of the individuality of the child with the new possibilities offered by the significant other--the teacher--that leads the child and teacher into "thirdness", into a new formulation and extension of understanding because of the power and influence of their semiotic relationship. Emphasis is on the activity that generates between them through language but also, equally or (as Uexkull maintains) primarily, through the nonverbal means.

In the words and gestures of the children in Mrs. Wayne's class, and in the other classrooms where I was able to observe the pedagogical process, it is evident that children, given their preference, would choose "secondness" as a highly desirable pedagogical relationship. Except for the most exemplary students who can find and complete appropriate academic activities for themselves, most children need and want the one-to-one pedagogical relationship with their teacher. In fact, much of their classroom time, aside from actual task performance, seems to be taken up with their semiotic strategy to attract and gain their teacher's personal attention.

In "thirdness", the relationship is more complex. The class takes on a character that reflects the characteristics of its dominant members. The relationship is now premised on a social matrix that, having been created, now governs how individuals will be allowed to act. The individual is merged into the group and his voice is heard only proportionately to that of all others. Consequently, there is a greater probability that social accord will be based on the word of the teacher or the majority rather than on individual preferences. "Membership" requires an acquiescence, a waiting. It demands the submergence of individuals' personal interests, their unique rhythm of learning, their way of learning and, even, their purpose for learning. At the same time, because many can become involved (though relatively briefly at any one time), semiotic activity is diverse and may uncover what an individual learner would not be able to phrase as a request for clarification nor contribute as an extension of what is under discussion. The range of potential connotations may be significantly increased simply because of "thirdness".

However, while this uncovering may be beneficial, for others it may delay their progress through ideas and synthesis. This, in turn, may create frustration, indifference, or a placid neutrality which, when taken on as a "way" of learning, deprives the learner of the full satisfaction and sense of accomplishment that is possible. In this light, "thirdness" reflects a compromise between individuality and group commitment and characterizes much of what occurs in our classrooms.

It is not difficult to understand why children express their preference in working with small groups, or seeing the teacher privately, even if this means having a one-to-one relationship for only a brief period of time. "Thirdness" gives far less opportunity for semiotic relationships to evolve, yet it is in "thirdness" that the vast majority of pedagogical exchanges occur. As has been discussed in "Semiotics of Interpersonal Relationships", in most children's minds, the importance of positive relationships with the teacher and with other children takes precedence over pedagogy per se. Skilled teachers are aware of this, and often make a personal commitment to compensate each child as much as possible for the inevitability and limitations of large group instruction.

When applied to an elementary classroom, the notion of "firstness", "secondness", and "thirdness" suggests that a judicious balance of each type of pedagogical experience during the school day would come closer to meeting the ways in which children prefer to learn and need to learn. The whole classness of "thirdness", i.e., children working together on the same material in the same way, points to a conformity that is not inherent in the children as individual learners. Within the commonality of "thirdness", there should be ample scope for "firstness" to emerge as well.

The Interlinking Semiotics of Pedagogical Meaning

It becomes apparent that pedagogy is not simply a matter of teaching children but that it is a process with numerous influencing semiotic factors. Casagrande (cited in Preziosi 1982:413) speaks of socio-cultural mazeways. It is an appropriate term to describe both the task and the circumstances of pedagogy in our schools. Along with teacher preferences, classroom expediencies, and administrative expectations, there is a complex network of conventions, rules, and traditions that govern virtually every act of teachers and children.

It is in looking at these acts that the semiotics of pedagogy are found. As symbolic phenomena, they give the teacher and children access to meaning that, in turn, governs their own actions and expectations. Both teacher and children (and researcher) "read" and respond to each other on the basis of these signs. They understand or learn to understand the rules and connotations that create their collective lives. They make sense and give sense to what they say and do in that space. There is never a total harmony of intent or practice but, over time, there is a resolution of differences and a creation of community. The classroom becomes their stage, their place of enactment. Their relationships become their play, their being-together. Pedagogy becomes their purpose, the intent of their being-together in this place.

What does it mean to be a semiotic being in the classroom? It means to learn and accept the semiotics of space, relationships, and pedagogy that the teacher permits to evolve. It means taking your "place", your "role", and your "performance" with the intent of creating the best possible compatibility with your teacher's semiotics of being-in-the-classroom. It means holding "firstness" until such moments that you are free to be first rather than one of many. It means seeking "secondness" with others with the teacher's approval or, if necessary, without it. This may mean breaking the conventional rules with discretion and a fine sense of timing.

Being a semiotic being in the classroom means living in "thirdness" for the vast majority of time because there is no alternative. This may mean a judicial withholding of self, an unexpected vulnerability, or a joyous sharing with others. It may mean being chosen or being left out, being recognized or being ignored, being expressive or being silent. It will mean continual assessment of the situation and rapid self-protective decision-making. It will mean looking into your teacher's eyes to "read" what is there that may not be in her words. It will mean obedience or hiding disobedience. It will mean performance or masking non-performance. It will mean a thousand signs "read" and responded to with alacrity.

Being a semiotic being in the classroom means taking from the teacher's semiotics those signs and meanings that make sense in the total pattern of what is known, and expanding that pattern to embody new meaning. It means discarding old meanings when new ones are perceived as better, fuller, or truer. It means holding some partially-formed meanings in abeyance until their completeness is given by other signs. Being a semiotic being also means collecting meanings and signs in reserve until there is a moment in which to place them. This "holding" can be for a very long time, or only a moment. It means a waiting-for-meaning, waiting until language and non-linguistic forms of meaning accumulate enough in a given context that, then, it is possible to know.

Being a semiotic being in the classroom is to create and give signs to others, to receive and understand them in return. It means to master and polish the use of signs in reading, writing, and arithmetic until they can be called on command to perform as they are needed, in whatever way they are needed. It means having more signs than could ever be used at any one time: everyday signs, special signs, exotic signs, creative signs, powerful signs, personalized signs, rare and valued signs. It means being a sign-user, a sign-maker, and a sign-evaluator. It means "to be learned"--having a profound and extensive knowledge of semiosis and semiotics--knowing the process of sign creation and the polysemous content of many sign systems.

"How a classroom means?" is answered with every word, gesture, and nuance of what it means to be a semiotic being. But it is rarely the "firstness" of being. Rather it is in "thirdness" of class-and-teacher that the classroom takes its meaning. It is in the life of these persons that meaning is created and it is only in that life that it can be "found" by those who participate in its originating context or by those who observe that meaning taking its form. In all the examples described, there is no meaning that stands alone, self-contained and self-complete. A child speaks of himself and others; a teacher comments on her class interaction; another teacher reflects on a lesson's effectiveness; a child ponders on her teacher's mood...all these examples reach from the sign-giver (sign-maker) to encompass others, to draw from the flow of life and meaning those fragments of reality that "speak" of some portion of that life and that meaning. Each implies a need to speak and a need to be spoken to, of a living-and-becoming in the classroom.

In the examples, too, is a multiplicity of ways in how meaning is created and how the classroom means. Certainly, meaning is in words. But it is also in gesture, pause, laughter, and sighs. It is in the movement of persons about the classroom, in the position of desks, displays, books, and resources, in the time and pacing of what is done, in the juxtapositioning of activities and intentions, in the sequence of the school day, and in the sustained or terminated pedagogical relationship between teacher and class, teacher and child.

The Critical Influence of the Semiotics of the Teacher

Over and over again, the success of pedagogical experiences for the children comes back to the semiotics of the teacher--the signs that allow or inhibit, encourage or thwart, praise or censure, recognize or ignore. In the final understanding, the teacher's signs allow the child to "become" or forestall that growth. Over and over again, the semiotics of the teacher's interpersonal relationship with the children, individually and as a group, seem to preface the success or failure of pedagogical experiences. How the teacher "signs" her regard for the class and for each child appears to be critical in setting the stage for the kind of pedagogical experience that follows. The moment of determination may be extremely brief but its influence cannot be underrated.

Within that pedagogical exchange, the teacher's receptiveness to learning as a life-experience is again a critical determinant. Considerable discussion centred on the spatial semiotics of the classroom, but implications in the intellectual sphere are even more critical. If the teacher's pedagogical outlook is classroom-centred rather life or than life or world-centred, the semiotic scope of inquiry and learning is confined to the boundaries of that classroom. The semiotics of the teacher's attitude define the boundaries of the children's content-learning. We have also seen how powerful the semiotics of the teacher is in influencing the children's understanding of the world. Where the teacher sets down the sign-of-completeness is where the children stop learning. Where the teacher tears up the sign-of-completeness and, in all her signs and meanings, "frees" the children and invites them into interconnecting inquiries, the children know that learning is a life-long process--exciting each step of the way, yet never complete.

The Power of Icon, Index, and Symbol in Pedagogy

Peirce's differentiation of icon, index, and symbol provides yet another perspective for interpreting the semiotics of pedagogy, for these semiotic variations are inherently a part of learning. What is perceived as object-separate-from-the-self may be said to have an iconic nature. The object's composition, as perceived by each individual, is a composite of signs that is learned and becomes meaningful in the semiosis of situational contexts. Uexkull turns to the clasic example of the infant identifying the mother as a "sign" of comfort and nurturing (Baer 1981:194). The mother's presence, and in particular the mother's face and what it "signs" to the child is simultaneously the same: mother=comfort, the one standing as an icon or similar (or seemingly identifical) visual representation for the other. Later, the infant makes the association that the mother's voice coming from another room is an index of her presence, a "pointing to her" without her actual presence. Still later, the child learns the aural-image, the symbol "mommy", as an arbitrary abstraction standing for (re-calling) the physical being of his mother. As the child's intellectual capacity matures, his learning (originally totally derived from direct experience, i.e., from iconic experiences) accumulates with and from indexical and symbolic experiences as well. But the genesis of semiosis continues to come from the intimacy of the learner and the reality of his world as perceived by him.

And it is here that pedagogy has traditionally insisted that the learner experience directly as much as is reasonably possible, and that symbolic abstraction be rooted in knowing a direct relationship between the self and what is to be known. Early childhood education emphasizes this relationship in its objectives and practices. The semiotic foundation of a child's learning is carefully nurtured in first-hand experiences, as if to "set" visual and experiential imagery, to simultaneously build memory icons and link these icons to language. What is accepted now as wisdom in early childhood education is relatively recent in the historical spectrum of the education of children. Earlier, educating children meant confronting them immediately, and in some cases exclusively, with the abstraction of symbolization, i.e., learning to read by reading from the Bible. The question remains, however, whether as many children then, given the opportunity, would have learned to read as do now. And the corollary, in contemporary terms, would be to ask why so many children have difficulty learning to read now?

What comes through so emphatically (as described in "Lessons Outside the Classroom" {infra:217} and in "Diorama as a Metaphor for Pedagogy" {infra:479}), is older children's need for and decided preference for *iconic experiences* in their pedagogical lives. While the visit to Museum cannot replace classroom instruction, the children's reflection on their experience there is, in itself, an index pointing to the importance of a particular kind of living-in-learning that is perhaps too rare for many children. Even though for Mrs. Wayne's class, the semiotic connnection for learning came from static displays and artifacts, these created an iconic relationship between what the children had been taught or had read about before and what they now understood. This link is a symbiotic one, arising from knowledge previously built on language and abstraction and now *re*activated in a situational context that is cumulatively semiotic.

In the elementary grades in particular, pedagogical practices would be considerably strengthened if greater use were made of iconic and indexical experiences prior to symbolization with the children. This would mean that a teacher would consciously begin a sequence of learning with "firstness" or the nearest possible "reality-focus" (with those objects and events that are closest to the children's experiential repertoire). She would gradually introduce indexical signs as the intermediary links, and finally present the symbol or abstraction that evolves from this shifting from what is real to what is only possible in the mind. This would mean more than the teacher presenting the iconic, indexical, and symbolic interpretation of a given learning. It would mean that the children would be taught the characteristics of each step of distancing from what is real and that they would be given multiple opportunities to create their own related meaning in parallel forms. As the children's comments during and after their visit to the Museum suggest, it is not perhaps the sequence that is infallible but that each sign-quality be incorporated in their learning.

Pedagogy would then be an experience in which the learner is given many different semiotic versions of the same and related content so that a layering of meaning would occur. As it accumulates, this sedimented meaning should arise from and be closely identifiable with the learner's own world and level of understanding. This semiotic variation would circumvent the common methodological practice of giving the learner "more work" in an attempt to make the learning take. The very necessity that provokes such repetition is a sign that that particular semiotic approach did not lead to the learner's understanding. It is a sign that implicitly asks for a different presentation and, if the initial presentation was highly abstract, it may demand a more iconic interpretation, i.e., demonstration, manipulation of concrete objects, creative enactment, or experimentation. Pedagogy then serves to take advantage of the openness of sign systems rather than becoming stalled in narrowly persistent and closed systems of meaning.

What is advocated is not the deletion of purely symbolic systems of creating meaning but rather a more deliberate and purposeful exploration of the power of iconic and indexical signs as part of the pedagogical repertoire. Nor is this multiple semiotic variation of meaning-creation appropriate only for children. As Bunn (1981), De Bono (1970), and Hampden-Turner (1981) demonstrate in their writings, illustrations, models, and diagrams are highly successful modes of conveying and creating meaning for adults as well. When Carmen, a nine-year old girl, remarks that she really likes her teacher drawing on the blackboard because it helps her understand, she speaks for many children. Many teachers, perhaps totally unaware of the power of the sign, will quickly sketch or doodle an explanation for someone who does not understand. In these actions is an expression of a human need to use multiple sign systems frequently and freely. Iconic and indexical sign alternatives have a significant contribution to make to pedagogy. In our haste to bring the children to symbolization in their thinking and creation of meaning, it may be well to pause more frequently at the "firstness" of iconic variations and at the "secondness" of indexicality on the way to "thirdness" of abstract sign systems.

The General Semiotics of Pedagogy

There is an interconnectedness of semiotics of pedagogy that builds meaning. A sign alone is not enough. Where does that sign originate? From what does it take its meaning? To whom does it give meaning? These are all important considerations about what contributes to and creates meaning. Consequently, it is not possible to definitively designate the semiotics of pedagogy. It is possible to point to "language", "gesture", "posture", "voice modulations", "ways of addressing", "group dynamics", and a multiple of other ways of communicating through sign systems. But the categorizing of semiotics does not reveal how meaning comes into being in the classroom. It is a little unsettling to have come so far to have to say "the semiotics of pedagogy" are embedded in the way in which teacher and children use space, relate to one another, and learn together. Yet these three themes seem to enclose the pedagogical process without delimiting it. Within these themes is the concept of freedom, respect for the individual, assimilation into groups, and the furthering of knowledge through a child's "becoming" made possible by the teacher through meaning.

Ultimately, the semiotics of pedagogy is closer in character to the semiotics of film rather than to the specific semiotics of language analysis. There is no definitive grammar, no distinctive and repetitive patterns of signs, no confined repertoire. Rather, the semiotics of pedagogy is composed of an infinite variation of multiple sign systems, evolving from and in a fluidity of use between teacher and learner(s). The semiotics of pedagogy is ever-changing, ever-adapting, ever-cognizant of the human element that calls for pedagogy and implicitly governs its success.

The only pattern that is semiotically discernible is the pedagogical relationship that comes from the requirements of a teacher's role and a learner's role. It is a pattern of intentionality, the "warp" as witnessed in a teacher's responsibilties for a given grade, in a given school, with a given group of children. But even this "warp" is relative to the individuals involved: to the teacher, to the children, to the conventions and practices of the school, and to the requirements of the grade curricula as laid down by a particular jurisdiction. In a broad sense, this is the situational context, the structure or holding frame, that underlies the pedagogical intentions for a given school year.

The infinite variations of the "woof" that make up the design of that particular pedagogical relationship come from the individuality unique to the human beings assembled together as teacher-and-class and the rapidly changing contingencies of their lives together. It is here that there is a difference between one teacher and another, between one class and another. The semiotics that teacher and that class bring to the pedagogical situation give it its characteristic quality and design. No two are ever the same. Nor is the semiotic design of any given teacher-and-class constant over the period of time they have together.

And here, once more and finally, we come back to the teacher. For it is the teacher who semiotically creates how the classroom means and how that meaning will be conveyed in that classroom. It is he teacher who is the catalyst between the curricular requirements and the children's needs, who activates through her wn semiosis the degree to which the class will be open to earning or closely-bound to the measured beat of subjet-matter regardless of their interests and needs. It is the tacher who links the classroom world to the world beyond its wlls, who recognizes what children already know and takesthem beyond that point. It is the teacher who explores with the children a multiplicity of sign systems while, at the same time, exploring what has been achieved culturally, historically, socially, and within technology. It is the teacher who uses to advantage the organizational and contextual semiotic space and intent of the school to achieve significant and important growth in the children's intellectual life. It is the teacher who moves the children from specialized codes of behavior and specialized patterns of learning to becoming unique individuals, confident and skilled. She moves them from the solitary "firstness", through the "secondness" of the pedagogical experience, into "thirdness" with the world.

The Semiotics of Delay Defeating Pedagogy

Ideally, all this seems possible. But as the examples here have shown so clearly, teaching is a highly complex, unpredictable, and demanding undertaking. It is difficult to teach with endless demands on your time, attention, and effort, when your every word, gesture and action may be interpreted differently by the children, when every sign from them could be important. Having brought the details of semiotics of pedagogy to view, I can only wonder if knowing of their complexity is a gift to the practicing teacher? Yet, perhaps the most important contribution this study can make may come from highlighting the semiotics of delay that, in turn, defeat the children, many of whom are extremely vulnerable to the semiotics of their teacher.

The semiotics of delay are found in the teacher's signing (perhaps, and certainly most frequently, unconsciously) her own disinterest in the topic or in the children, her lack of preparation, her indifference to the needs of the children, and her impatience with their difficulties. Delay is signed to the children in her weariness, her abruptness, her hestitation, her neglect, and her unpredictability. It is signed by her posture, her voice, her gestures, and her withdrawal. As Brian's story illustrates (infra.:411), when the teacher "gives up" on a child or on the whole class, they in turn have little reason to have faith in themselves. If they cannot turn to the teacher in their needs, to whom can they turn? If the classroom atmosphere becomes charged with antagonism, frustration, and hopelessness, the children are not long in absorbing these symptoms into their own manner and attitude. The semiotic cycle of defeatism can only perpetuate itself.

The semiotics of delay are particularly potent and may well underlie the trend of awarding children "warm fuzzies" and consistent recognition and praise. But practising positive behaviors alone, without an understanding of the semiotics that undermine such supportive acts, can create another superficiality. Many times throughout their comments and actions, children have shown that they are devastatingly candid in their perceptions of how effective the pedagogical process is and how genuine a teacher's behavior is. When teachers can examine their own repertoire of semiotics (especially through interpreting videotapes of their lessons), they will understand the power of their signs in influencing, both positively and negatively, the children's responses. Similarly, perhaps for the first time, they will see what signs from the children provoke their responses and the effect their responses generate in return.

The Power of the Semiotics of Communitas in Pedagogy

There have been many descriptions of particularly successful lessons. In these, the semiotics of delay were nowhere to be found. Instead the semiotics of communitas prevailed--the feeling of unity created between individuals involved in a common purpose, coming to what they want to know. Here the signs of sharing and togetherness predominate: the shared smile, quick but meaningful eye contact, an encircled arm, a wink, a spontaneous burst of group laughter, the stillness of concentration, the soft breath of pleasure or surprise, or an uninhibited shout of exultation. But communitas can also be expressed in a sea of frowns, in a group groan of dissatisfaction, or in a sense of pervasive inevitability. The semiotics of communitas include all the sounds and gestures of "secondness" and "thirdness", of not being alone in "firstness" but being part of a whole that has the same concerns and the same intentions. It is a going-together, a caring.

As teachers or learners, we all have felt (though perhaps only rarely) a moment of joy and clarity when the dialectical dialogue (that Riegel speaks of) is in its purest form. As teachers, we know when we have created meaning--learning. We understand that moment of learning; better than can possibly be expressed in words. We experience it within ourselves as a totality of being. "If I do say so myself, that was a good lesson!" When children know they have learned, it too is a totality of knowing. When Danny shouts out in the classroom, "I know! I know!", he can hardly contain himself in his desk. When a group of boys huddled under the table, work out a solution to a logical puzzle before any other group does, they break all rules of decorum in declaring their triumph. "We're finished!" and they rush en masse to have Mrs. Wayne confirm it. (She does.)

As Mrs. Wayne reads the last chapter of The Trumpeter Swan to the children, there is a quiet tear, a burst of recognition, an explosion of laughter, a sigh of regret, and a prevailing sense of fulfillment as Mrs. Wayne closes the book with a slow final touch. When Matthew yet again struggles to follow Mrs. Wayne's explanation of how to add fractions, he suddenly pulls the end of his chewed pencil out of his mouth. He sits very still for a moment. Then he looks up at her in surprise and says, "I get it!...I can do it now! Let me do the next one!" (And he does.)

In these signs of communitas, there is hope, possibility, and even survival. There is an overcoming of problems, a solving of mysteries, a circumventing of barriers. There is a recognition that learning can be difficult, can take time and effort, and that it evolves differently in every individual. But there is in the semiotics of communitas--a resonance of possibility--that together we will work through it all and we will succeed. The difference between a lesson or a classroom where the semiotics of delay predominate and where the semiotics of communitas take precedence, is so glaring that, once this perspective of looking at pedagogical experiences is taken, it becomes an invaluable aid in re-creating the constructive semiotics of success. Inherent in the semiotics of communitas (of success) is a belief in and respect for the individual. And, not unexpectedly, this threads its way through the semiotics of the spatial, relational, and pedagogical life of a classroom and is a measure of pedagogical accomplishment.

As a semiotic being, when a teacher begins a pedagogical exchange with the children, she moves them into new sign-territories (new words, new concepts, new understandings).

The success of that move will depend on her own sense of communitas with the subject, with the children, and with herself as teacher. If this is strong, there will be no holding back her enthusiasm, her lucidity, and her effectiveness. There will be no holding the children back from learning. Admittedly, not all children will learn everything, but many will. Admittedly, the teacher will not be able to teach them everything, but she will teach enough.

When a teacher's affinity to the children, to the subject, and to the situation is unquestionable, the children will go with her into that learning. They will be caught-up in the semiotics of exposition, clarification, and elaboration. They will see the links between what they are learning and their own lives. They will see down pathways where what they have learned can be explored further. They will know they are learning. And they will come willingly, again and again, to that learning because the teacher is teaching. The semiotics of delay are nowhere to be seen. There is no need nor room for them in the semiotics of successful pedagogy.

III. THE INTERPRETANT: THE SEMIOTICS OF THE RESEARCH PROCESS

The research experience is a profound one. It wrenches one's preconceptions from their well-established niches and demands new considerations be given. In exploring the semiotics of an elementary classroom, I chose a field of study that was new to me, but I took its perspective into a field I knew well. This juxtaposition brought new insights that I had never before credited as so critical to pedagogy: the incredible interconnecting influence between the environment in which the teacher and children live, the relationships which they are able to establish between themselves, and the semiotic exchange of meaning between them. This dialectic of signs is particularly important because of the waves-of-meaning it sets in motion. This "chaining" of meaning creates a totality of meaning that is the accumulation of signs that have a particular affinity to one another. Other signs, though present, are neutralized or dismissed as not relevant and, therefore, not meaning-full. The uniqueness of the "chaining" arises from the individuals involved, between teacher and learners or between researcher and readers.

The interpretations of the semiotics of an elementary classroom presented here came directly from the research process that I experienced from the conception of this study to this final stage of documentation. The exploratory study gave me the background for formulating an understanding of the "discernible moments" and "experiential texts". The major study gave me the opportunity to confirm their value as a semiotic "reading" of human experience and as a way of differentiating from the sheer volume of impressions those judged to be pertinent to a richer understanding of the pedagogical process.

While it is possible to separate meaning into semiotic classifications, in terms of understanding there is no separation. The designatum, sign, and interpretant are so interlinking that it is only in their coelescence that understanding comes. Consequently, this last section as "The Interpretant" is a curious formatic division. Along with the discussion of "Discernible Moments" (infra:85), it sits separate and self-contained. However, it is important to note that while this section sets out the path I followed, its origins and influence link back to the description of the exploratory study and, I hope, project an explication of a research approach that centres on the interpretation of human experience.

Human Experience as Text:
An Interpretive Mode

> If knowledge is a product of individuals, then these individuals are of primary importance.
>
> (Martin 1981:32)

The possibility of considering human experience as text surfaced during my exploratory study. It became apparent that what I was dealing with, in terms of the pedagogical meaning created between teachers and children, was not the meaning but fragments of sentences, gestures, and action that were used to convey some sense of that meaning. Salmond (1982) in her discussion of theoretical landscapes, points out that

> Language is an instrument for the negotiation of meaning and that contexts of utterance and pre-existing knowledge are important both in the saying, and in the interpreting anything that is said.
>
> (ibid.:65)

She differentiates between the way in which anthropologists and ethnographers (and other researchers) take a stance in structuralism, ethnoscience, or hermeneutics from which to view their subjects, and how this reflects in the relative status that they hold (or allow) to exist between them. According to Salmond (ibid.:74-75), these "metaphors of orientation" form the roots of interpretive style and insights. For example, taking a predominantly structuralistic vantage point gives emphasis to the patterns of meaning rather than to the individuals creating that meaning. In particular, it is the language, as a reflection of the structure of the society from which it emanates, that most concerns the researcher. In a perspective assumed from ethnoscience, the researcher is placed more completely within the life experience of the persons being studied. Here, the intention is to "see" through the eyes of the participants their world view. The documentation of this ethnographic stance is primarily descriptive. On the other hand, the hermeneutic perspective on life experiences is predicated on achieving "merging horizons", a consensuality of understanding in which both the researcher and the persons involved come to a new or extended meaning.

While I can see the advantages of each, the hermeneutic merging of meaning seems idealistic, the privilege of those who can engage in a one-to-one dialectic dialogue over a period of time. It becomes a mutual pedagogical experience premised on empathic intentions and on a coinciding willingness to assimilate another's ideas. The results of this interactive exchange can be enormously exciting and represent an advancement in ideas and praxis. However, in the context of this study, the hermeneutic approach to exploring pedagogical meaning was neither possible nor intended.

Dealing with a conscientious teacher who has many in-school and out-of-school commitments, and with as many of the children in the class as possible, allows only rare opportunities for a truly dialectical dialogue.

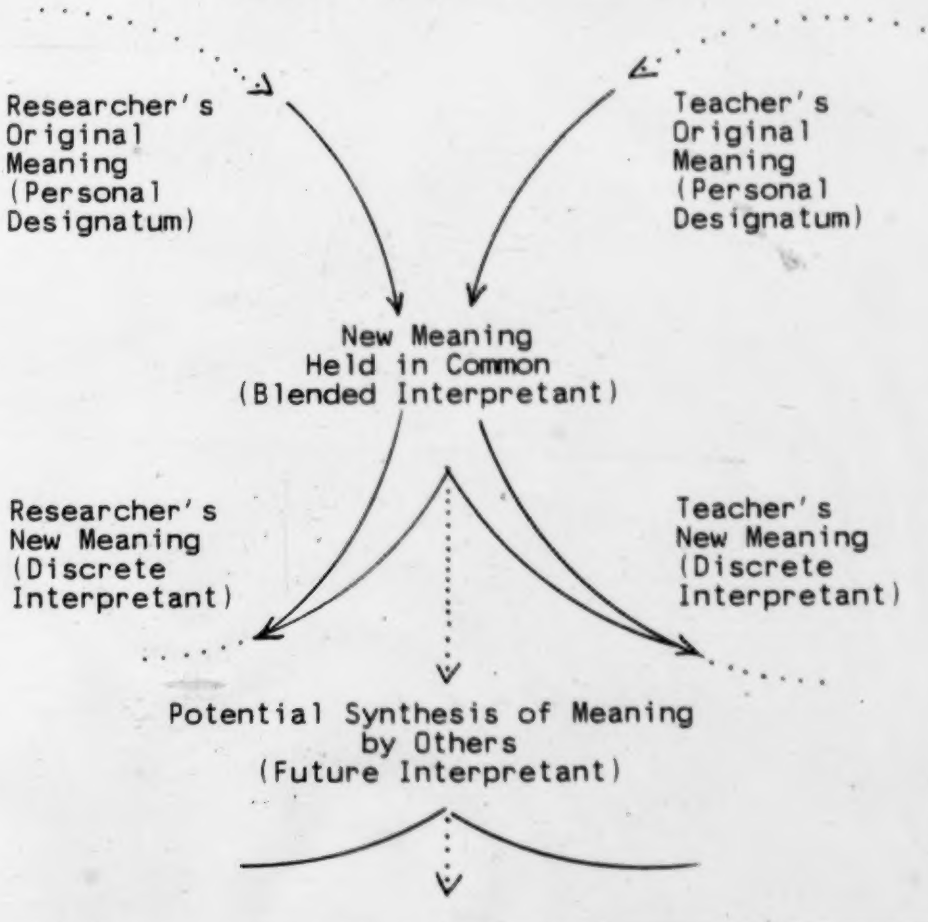
As a result, my approach might be best described as an eclectic-contextual-interpretive variation of exploring meaning from a semiotic base. The meaning ultimately given to the life experiences of teachers and children is founded on their actions, attitudes, and language, but (and this is a critical distinction) it is not restricted to containment within these semiotic traces. The meaning I present in this document is not exclusively negotiated meaning nor is it meaning as would be reflected in "merged horizons". It is meaning I have attributed (with as much input from the persons involved as possible) to the traces they have continually given me in many and varied contexts. In the process of dialogue, there has been a lively exchange of ideas and opinions but there has been no attempt to persuade for consensuality. Indeed, differences in interpretation give richness of meaning rather than deplete it.

The interpretation I have ascribed to the collection of experiences gained in elementary classrooms and from teachers and children is a reflexive interpretation. It is largely new meaning, a semiotically-oriented meaning. Some of this meaning is now held in common by the teachers, particularly by Mrs. Wayne and myself, as a blended interpretant. As such, this area of meaning does represent our agreement. We found consensus in the potent effect of children who are non-conforming, in the importance of a teacher's explicit interest in a given subject as an influence on pedagogical methodogy and on children's responsiveness to that experience, and in the significance of tradition and ritual in school activities that creates a community of learners rather than compartments of isolated classes.

Some of the meaning that evolved from our experiences together is exclusively the teacher's for only she knows what, from our discussions and banterings, she thought about when she was alone. Similarly, only I know what I pondered when we parted or what continues to concern me now. The fact that we both explored the meaning of meanings for ourselves, and did this frequently, is acknowledged. What we did not wish to do, or did not have the time to do, was to discuss what these self-generated thoughts were and where they led us. These were meanings of an individualistic quality which remain, for each of us, discrete interpretants. These meanings arose from "secondness", in reaction-with our earlier discussions. Without those discussions, we would have had no source-ideas to explore. These personal meanings are not contained but can (if we allow) follow labyrinths of possibilities for as long and as far as we wish. But they are there. They are there because of our experience together around the experience that Mrs. Wayne had created in her classroom. Where in the hermeneutic circle does this continuum of meaning outside the dialogue appear? Where is the reference to meaning that does not re-enter the shared dialogue?

The potentiality inherent in the creation of text and expanded meaning from human experience in shown in Figure 8:

Figure 8 Semiotic Traces of Dialogue and Experience As Potential Text


Researcher's Original Meaning (Personal Designatum)
Teacher's Original Meaning (Personal Designatum)
New Meaning Held in Common (Blended Interpretant)
Researcher's New Meaning (Discrete Interpretant)
Teacher's New Meaning (Discrete Interpretant)
Potential Synthesis of Meaning by Others (Future Interpretant)

The "thirdness" of meaning that arises from the collection of life experiences is what I have presented here as dissertation. It is the interpretation I have given to what I have been witness to. In many ways, there has been a "jump of meaning" (Uexkull 1979) into the symbolic realm, from the "saying" to the "said" (Ricoeur 1978). But it is imperative to note that, as I move from the sayings of the teacher and children to present what was said, I must leave them behind. I have only the semiotic traces of their words and actions in writing and on audio and video-tapes. I must turn from them to myself. What does all this mean to me? And here, I must again make a separation. What this means to me personally, and what it means to me as an educator who wishes to share this meaning with others may be quite different. These meanings will not be one-better-than-the- other, but each must take a distinctive semiotic form that permits others to share in a relevant context. For example, the dissertation form invites certain readers and intimidates or thwarts others. In comparison, "Drama in Real Life" as featured in the Reader's Digest reaches different audiences, with different intentions and with no less value.

When I turn to myself to reflect upon the experience of witnessing the semiotics of the classroom, I must use language in its written form to convey what I have understood. In the process of doing this, my language becomes the final interpretant, preserved in documentation but open to future interpretation and reinterpretation as I (or others) take it up for further exploration. The way in which I move from human experience to experiential texts is described in the following section.

Experience as the Genesis of Text

Before it is possible to refer to action and dialogue as text, it is essential to recognize that they are not the experience but only a faint reflection of that experience.

> A reality never sheds its symbolic and signifying character.
>
> (Gillan 1982:141)

> To speak, consequently, is to wend one's way through a symbolic world whose sign-posts and pathways are always shifting and disappearing.
>
> (ibid.:126)

The etymology of "symbol" can be helpful in distinguishing between an experience per se and evidence or traces of its existence. Bunn (1982) uses Karl Menninger's description: symbol is derived from the Greek symbolon, a distinctive mark, from Greek sym-ballien, meaning "to throw together", that is, a broken shard (for the most part with writing on it) that fits into the piece from which it has been broken. Therefore, when as researchers we look at another's experience, we are by analogy only seeing the shards--the symbols--remaining. The experience itself has returned to the clay mound from which other experiences will rise. It is gone, wedged into the totality of experiential life. In our admiration of the finished product--the experience--as captured in dialogue and interpretation, we easily forget its creative source, its creative force and continuum.

From Experience to Text

> Human action is in many ways a quasi-text.... It is inscribed in the course of things and becomes an archive and document.
>
> (Ricoeur 1978:160)

In this study, text is considered to be that which is set apart from experience but arising from it, and that which leaves traces or evidence of its existence in some semiotic form as visible documentation. These traces can then be examined in a time and place removed from the immediacy of its creation. For many authors, text is only that which is in written form. Gillan (1982), for example, claims that

> The text rests upon what in spoken discourse can be captured in the written word...not the spontaneity of conversation and the supple style, but the symbolic web of discourse... giving and enduring experience in space and time.
>
> (ibid.:109-110)

Text then might include photographs, journals, personal documents, records of activities, video or audiotapes, or computer printouts. It is what is left in human thought and accessible to others after the experience has passed. It is a condensation of human experience through the use of language.

Text, in this sense, must take on a tangible form. As Ricoeur states, human action has a stature that is not limited its importance for the situation in which it initially occurs but allows it to be reinscribed in new social contexts. Finally, action (like text) is an open work, addressed to an indefinite series of possible readers (ibid.:160). Ricoeur anchors his argument on the "fixed" form of discourse because discourse is what disappears (ibid.:16). It is the text, the written form, in which meaning resides.

> What, in effect, does writing fix? Not the event of speaking, but the "said" of speaking, which we understand as that intentional externalization constitutive of the aim of discourse thanks to which the sagen--the saying--wants to become Aus-sage--the enunciation, the enunciated. In short, what we write, what we inscribe is the noema of the speaking. It is the meaning of the speech event, not the event as event.
>
> (ibid.:16)

> It is not the I as I, nor the Thou as Thou, that is communicated; rather, it is the subject-matter pointed to, experienced, reflected on, that is the stuff of communication.
>
> (Palmer 1973:219)

In leaving behind the immediacy of the situation, the written text becomes a "sedimentation". Ricoeur states that events leave their mark in time as social imprints, as a "trace", with the possibilitity of becoming an "archive" that is more than could be meant by individuals in a given context. For "a work not only mirrors its time, it opens up a world which it bears within itself" and has a "durable relevance" (Ricoeur ibid.:24-28).

Within research methodology, therefore, it is possible to infer from Ricoeur's differentiation that actions and discourse as observed in their creation are not to be regarded as text because of their living-ness. It is only when traces of action and dialogue are translated into a fixed form (observation notes, journals, or other representational formats) that they can be considered "text". This detachment from life into an annotation is credited by Ricoeur as bearing a more authentic meaning, an expanded meaning

> which escapes the infinite horizons of its authors. What the text say now matters more than what the author meant to say, and every exegesis unfolds its procedures within the circumstance of a meaning that has broken its ties with the psychology of its author.
>
> (ibid.:18)

It is with some satisfaction that it is possible to follow Ricoeur's criteria for a fixed form--an enunciated--and at the same time not break too precipitiously from the pyschology of its authors, to retain much of the meaning-makers' life-experience and its context. This can be accomplished, at least in part, through the use of video and film. Such a format can honour Ricoeur's criteria that "discourse is always realized temporally and in a present" which he parallels with Benveniste's "the instance of discourse" (ibid.:14). The video forestalls the momentum of the experience into the future (which, of course, continues beyond the filming) and allows us to re-run the past, to re-view and re-understand what the experience is and what meaning emanates from it. Further, the video preserves other distinctive features of discourse as defined by Ricoeur: its self-referential nature as speaker speaks to another, its expression through the symbolic use of language, and its presentation of a world view to the person addressed (ibid.:2-4).

While Ricoeur does not preclude such co-creation, there is an implicit assumption that the hermeneutic activity is concentrated in the interaction between one person and a given text. However, the dynamics of pedagogical interaction demand recognition and individualization. Nonetheless, it is possible to turn to the human action evolving in the grade four classroom between the teacher, Mrs. Wayne, and her twenty-seven children and to see in that context the possibility of finding "traces" of the pedagogical meanings they are creating. It is simultaneously an examination of the "past" of observed events as they are witnessed in a "present" and as they project toward the future.

> What has to be understood is not the initial situation or the discourse, but what points toward a possible world.
>
> (ibid.:41)

By returning continually to the co-creators of discourse--the teacher and children--to give commentaries and explanations to video-scenes of their own experience, the emphasis is on discourse in a temporal dimension. Recording this discourse, in turn, becomes subject-matter for further interpretation. Willener (1979) maintains that, particularly in under-developed countries, significant changes can only come about by involving their citizenry in this very process: through an examination of their experiences in life and of their interpretations of those experiences. He advocates a critical role for video in this regard. Seeing self in self-analysis opens yet another layer of meaning and becomes a key to change and development.

Ironically, it is only when people--creators of meaning--are removed from the context of the creation of that meaning that their actions are accepted as constituting "text". However, if educational research, particularly natural-site observation and interpretation, excludes the meaning-makers, what authenticity can be credited to the findings? What Ricoeur can so successfully apply to literature and art does not necessily give adequate scope for the interpretation of life experiences. Holding stringently to his premises would risk the possibility of the research "text" bearing an overemphasis of the researcher's influence as author rather than reflecting meaning co-created by those involved. Even when co-creators are involved in the formation of the text, if the context in which that text is created is not also weighted in the interpretation, it may be less than authentic.

It is important then to consider with Ricoeur's insights, Riegel's sudarium and dialectial dialogues (1978) which emphasize seeing man's action, intentions, and dialogues through filters of socio-cultural, historical, and psychological circumstances rather than in isolation or in "frozen slices of time". Following Peirce's "utterers" and "listeners", Riegel highlights the intricate task that listeners (in particular) have in meshing their anticipation of the speaker's intentions with their own in dialectical dialogues. This is relevant to the researcher-as-listener, that is, in allowing the teacher's and children's meaning a chance to emerge without being preshaped or reshaped by the researcher's intercession. Ricoeur believes that it is possible to see human action, like a text:

> an open work, the meaning of which is "in suspense". It is because it "opens up" new references and receives fresh relevance from them, that human deeds are also waiting for fresh interpretations which decide their meaning...the meaning of an event is the sense of its forthcoming interpretations... The dialectic between the work and its interpretation is the topic of the methodology of interpretation.
>
> (ibid.:28)

I would argue that the dialectic between experience and its interpretation can also be a topic of the methodology of interpretation. I see the human action evolving in Mrs. Wayne's grade four classroom as leaving its own traces of pedagogical meaning, traces that are created through semiotics of space, interpersonal relationships, and pedagogical intent. I would also argue that by returning continually to the co-creators of discourse--the teacher and the children--it is possible (in Ricoeur's words) to "proceed from naive interpretation to critical interpretations, from surface interpretations to depth-interpretations" (ibid.:44). Again, however, the context of the teacher's and children's lives must be recognized as relevant. In any of our research techniques, we catch all persons mid-step in their ongoing experience. In this, it may be that Parkin gives the best advice:

> As ethnographers [researchers] observing the intertextuality of events, the question of our entry into the hermeneutic circle can be arbitrary or intuitive, but, in either case,

> is not reducible to rules, for who is to argue that one point of entry should rate above the other?
>
> (Parkin 1982:xxii)

Experiential Texts

Plummer, in his book entitled Documents of Life (1983), strongly advocates the documentary process as a humanistic approach to paying tribute to human subjectivity and creativity in concrete human experiences. These documents of life should be derived from an "intimate familiarity" with such experiences, and "abstractions untempered by close involvement are ruled out" (ibid.:3-5). It is essential to understand men on their own terms and "to complicate our judgment by giving each man his due" (Weintraub 1978:379 cited in Plummer ibid.:9).

In an effort to do just that--to give each man his due--I have designed a differentiation of the traditional understanding of text to focus more precisely on the creation of meaning *within* the experience of meaning-making. Inevitably, such "text" does become the researcher's text but, in keeping with the fundamental premise that teacher and children in this study are the primary meaning-makers, I see them (in the creation of that meaning) as text-makers too. I propose the following five-phase differentiation of texts resulting from my observations of human experience. Examples from Mrs. Wayne's class and school activities are included as illustrative texts.

Experiential Texts

Embedded Actuality Commentary Reflexive Documentary

Embedded Text - describes the within-experience comments, explications, and evaluations express by those creating the experience, intended to highlight, clarify, modify, or negate to those within the flux of that experience or to oneself the sense of that experience as it occurs. This forms the spoken text of the experience within the experience.

> Mrs. Wayne: Boys and girls, listen carefully. This is a new math procedure for you [adding fractions] and it may be a little difficult to understand. I'll go over it twice, so if you don't understand it all the first time, don't worry. I'll help you.

There are two forms of embedded text:

instantaneous - occurring within the action or dialogue (as in the example given), or

delayed - occurring still within the experience but at some later point and referring to some earlier action, dialogue, object, or intent.

> Don: Oh, Mrs. Wayne? {who is on her way to the reading table with a group of children} Before you go, can I just ask you something? Can I write about one time when I was on the ferris wheel? When we got stuck at the top?
>
> Mrs. Wayne: Yes, that would be fine. That fits our theme of "unusual experiences".

In these examples, it is evident that a particular emphases is being given to the meaning intended within the experience as it is being lived. It is an emphasis that stands apart from the central discussion but serves to focus on it by accommodating to particular needs of those involved. This embedded text, by its momentary insertion into the experience, serves as an index to the observer that a certain meaning is valued within that experience. In the first example, there is a pedagogical preparation implied that alerts the children to the importance of this new learning experience. In the second, Don has been sifting through his own experiences for an appropriate "fit" to the teacher's request. In Mrs. Wayne's approval, he is given confirmation of his interpretation of the task.

Actuality Text - consists of any evidence of an experience as recorded by anyone outside the experience but during the time the experience is occurring. Ideally, it is a total record as might be captured by multiple video cameras and observers, although this too would be incomplete. More conventionally, it is what can be recorded via verbatim notes, selected video taping, observation notes or audiotapes. While there is in any of these methods a considerable loss of actual dialogue and action, an actuality text is considered to be any reasonably comprehensive documentation of experience details as the experience occurs. It does not include any observer speculations or judgments about that experience.

E.g.{As classes assembled for the dress rehearsal for their Christmas Concert, I spoke the following commentary into the taperecorder.}

> [The grade two are coming in now carrying huge red bells and silver stars. All the boys in dressing-gowns with running shoes poking out beneath. An angel has just gone by, carrying her wings trimmed in silver rope. Girls are in party dresses. An oriental wiseman passes in a black cape and golden crown. Mrs. Hill and some of her grade fives come in carrying a huge banner which reads "The Flight Before Christmas" and is trimmed with holly. They are having some trouble keeping it from collapsing in on itself. Mr. Berger, the janitor, helps them out and then goes to the stage to take the stepladder out.
>
> Mr. Parry and Miss Carscallen are conferring about the stage lights, pointing and deciding. Mrs. Domansky, grade two teacher, is clutching her three wisemen by their sashes. The secretary, Mrs. Harrison, rushes in with a spare pair of antlers. She is adjusting them on a kindergarten boy's head, as he wipes his tears from his cheeks.
>
> ***
>
> Grade five girls rushing to the stage, saying "It's our turn! It's our turn!" in high nervous voices.
>
> ***

> [The kindergarten children are on stage now. A youngster's antlers' band slips down over his eyes and he stands there momentarily not knowing what to do. He struggles it back up on his forehead. It falls again. The audience titters.]

The actuality text may be a gesture-by-gesture description as long as the first example or longer or as brief as the second. From this actuality text, now transcribed to be used alone or in conjunction with the original audio-tape, it is possible to recreate the ambience and action of a very important day in the children's lives. It can remain as a description in its own right or it may be used as the basis for deeper interpretation, such as (1) a symbolic analysis of the meaning (for children) of wearing the costumes of particular people or animals, (2) a philosophical interpretation of the meaning of this re-creation of a cultural tradition, or (3) a psychological interpretation of belongingness created by this communal activity. The specificity of the actuality text allows an interpretive analysis to be developed if and when there is reason to do so. The more comprehensive the actuality text, the more authentic future descriptions and interpretations can be derived from it.

Commentary Text - is composed of commentaries and explanations by those involved in the creation of the experience after the experience, about the experience. There are several forms of commentary text:

free-reference - occurring when no recorded evidence is used to instigate the commentary

> Cheryl: [caroller after performance, speaking to Mrs. McKie]
> Do you know why we have blush on our cheeks?
>
> [No. Tell me why.]
>
> To make it look like we just came out of the cold.
>
> Jason: I hate makeup! I brushed it all off!
>
> Kristen: No! It was nice!

anchored reference - occurring when the commentary is cued by some reference to the preceding experience, either as a mnemonic device, or as an inquiry, following earlier commentary

> [How did you feel about your part in the concert? {referring to a 1920's New Year's Eve skit, by a grade six class and performed to an instrumental arrangement of "Putting on the Ritz!"}]
>
> Gale: Well, first of all, somebody switched the clock time. And for a cue, three balloons were supposed to burst and not one of them did! We all danced at the wrong time. The record got stuck and, at the beginning, the record didn't go on. And...let's see...well, that's all. It didn't quite work out.

immediate commentary - occurring on completion of the experience and preceding any other

[{continuation of above example} So what are you going to do now?]

> Gale: Well, we get the gym today so we are going to go and practise up.

delayed commentary - occurring after one or more other experiences have taken place. Such delay may be short or long term

[{continuation with Gale} Have you done a lot of practising, getting ready?]

> Gale: Well,in a way. We went over it quite a few times, but we have never done it on the stage before. And we have never done it right through, just in bits and pieces. So when we got up there, we sort of fitted it together. Well, we'll work on it some more.

The commentary text provides the context for and the texture of meaning. In her comments, Gale provides information about the evolution of their skit, their difficulties at this stage, and their plans for the future. Much of what she contributes comes without specific questioning. (Indeed, as in many such circumstances, I did not know except very generally what questions to ask.) It is in her conversation that Gale shares a richness of meaning about her experience.

Reflexive Text - is characterized as a contemplation of both the experience and subsequent statements or private thoughts about it. Reflexivity is marked by in-depth and insightful re-affirmations or re-interpretations of earlier commentaries and explanations, by extended explication, or by theorizing.

[Do you think the school should have a Christmas concert?]

> Gale: It's in the Christmas spirit, I guess. And well, our concert...it has different views of how you think of Christmas. Like our play "Snobville"...[performed to "Putting on the Ritz"]...Like some people think "Oh, goody! Party-time!" But other teachers did the Jesus-one for their part. They're all sort of different.

[Now, because you did the Snobville act, could your class be considered to be snobbish?]

> {protests} No! No, not at all. We did it just so we could have a few laughs. We were going to make a mistake in it. After "Chestnuts on an Open Fire", we were going to put on some David Bowie music...just for fun!

***

{Conversation with Paul, four days after the official staging of the Christmas Concert}

[Do you think there should be Christmas concerts?]

> Paul: Yeah. I've been in the concerts here for two or three years now. I learned to sing good. To have nice voices. And to love everybody...To love other people.
>
> And we can't sing carols in the auditorium any more. [referring to last morning assembly prior to the Christmas Break] That makes me sad. I like it...when everybody sings like that.

***

> [Shawn? Do you think we spend too much time on Christmas in school?]
>
> > Shawn: No! It's fun! We don't get very much work. And we learn about Christmas and we learn to have fun and we learn about Jesus.

Reflexive text gives access to more than facts and descriptions. It contains opinions, contradictions, beliefs, values, hopes, and expectations. It reaches into feelings and half-expressed ideas. It reflects the individual in conversations with his own thoughts, exploring them, juxtapositioning them, and considering them. It invites another to become engaged in this emerging clarification. Reflexive text is what is created between experiences, although undeniably it is an experience in and of itself. In many ways, the creation of the reflexive text allows the individual to consolidate the original experience in memory, to reaffirm implicit impressions, and to give some value to that experience in retrospect. It coaxes, pulls, or pushes the individual into new areas of thought, creating a linkage from the known past into the possibilities of the future.

> Documentary Text - is exclusively the work of the researcher (the reporter, writer, photographer, film-maker, scientist, artist, diarist, or others). It is a compilation of selected events, dialogues, actions, commentaries and explanations, and reflexive observations

of the meaning-makers of the original experience. It is an explication of what has accumulated as text during the experience, its interpretation, and its final analysis. The documentary text is the final synthesis of the research undertaking and as such includes the researcher's personal interpretation and theoretical constructs as these are derived directly from the research-experience or from intellectual explorations moving beyond that experience.

A Sample Sequence of Working With Experiential Texts

The following example shows the creation of different texts arising from the same experience. It moves from an immediate explanation by the teacher to a symbolic extrapolation by the researcher, from commentary to reflexive text, which (when included here) forms part of the documentary text.

Source: Taped Interview Now Designated As Teacher's Commentary Text

> May 7th. Mrs. Wayne: {smiling under a magnificent Mexican sombrero} Our school decided about three years ago, self-concept as individuals and as a school is important. We struck a committee and they came up with ways to get a positive school spirit established. So that's basically what Hat Day is about. It's something that the whole school is doing. And it's been fun!

From: Observation Notes Now Designated As Researcher's Actuality Text

> May 7th: The whole school bobs along today under hard hats, clown wigs and tams, cowboy hats, old battered felts, elegantly designed hats of feathers, flowers, net, and lace, under space helmets, baseball caps, and unique creations that defy labels or descriptions.

Reflexive Text by Researcher Based on Preceding Information

Under all this individuality is an implicit sign of belonging: to the classroom, to the school, to a group of people with a common purpose. The hats on teachers' and children's heads symbolize a commitment to each other, an agreement to go along with an idea, and to have fun while doing it. Hat Day is not, of course, as serious as Remembrance Day, Awards Day, or any special or formalized ceremonial occasion, but it shares with them a special-dayness, the flavour of communitas: identity and solidarity.

These special days are important in a child's life. They bring emphasis, variety, opportunities for expressing individuality, and for a visual expression of community. There are as many nuances to "school spirit" as there are teachers and children but, in an explicit demonstration such as Hat Day, the sense of "togetherness" is primary.

Linking to Other Related Commentary Texts

{Dec. 6: Teacher interview over lunch}

[How much are carols a historical tradition that children understand? Is it not more like just singing a song because you know it?]

> Mrs. Wayne: I don't think they think of it as a tradition unless we are talking about folk songs. When we are at camp, we talk about that a lot, but not so much in the classroom. I think it is important that they learn them now so that when they are older, they can appreciate their heritage.
>
> Appreciating tradition comes later. I know I certainly didn't appreciate the kinds of things my grandfather had to tell me until I was older. It seems to take a kind of maturity. If you teach them the traditions now, informally, when they are old enough to understand, they will have something to build on.

Expanding the Reflexive Text into Documentary Text

Special days, classroom ritual (opening exercises, rules and routines of movement, behavior and interaction), and traditions of the culture (events and beliefs that it commemorates in music, song, dance, and ceremony) form an interlocking network of memory and behavior patterns for the children. "To commemorate" from the Latin *com*--together, and *memorare*--to remember, and "to communicate" from the Latin *communis*--common, and *communicare*--to share. To commemorate means to bring, through this community-of- sharing, a society's beliefs and values to its children. For some children, the school's nurturing of specific traditions is incidental. Their home, church, and ethnic and language affiliations provide a rich tapestry of such experiences. For other children, the school is the only source of explicit demonstrations of a respect for mankind's cultural achievements, his beliefs, and his values.

Linking Reflexive Ideas with Semiotic Perspectives

The school is more than a building. It is the symbolic embodiment of attitudes and behaviors that preserve the integrity of society's highest ideals and accomplishments. Whether the school encourages the absorption of a way of life which respects all human beings through such fun-oriented activities as Hat Day, or conducts Remembrance Day ceremonies with profound solemnity, it signs to its students that there is an inherent affinity between one person and another. Symbols and actions associated with important days in our lives carry these implicit values. As the child becomes part of the semiotic experience (whether singing with joy and vigor or standing reverently in silence), he takes on the meaning of those signs and makes them part of his life. As Mrs. Wayne has expressed it, it may be a conforming impulse that brings a child to mimic others in these symbolic enactments. But, later, these rituals with their pattern, rhythm, richness, and meaning will be valued and in turn passed onto other children. The importance of the school's role in this cannot be underestimated.

The Value of Experiential Text Differentiation

As shown in this sequence of texts, I have chosen to differentiate between the human documents obtained during the research process of gathering information (the embedded text and actuality text) from those created anew by reflection by the persons involved in the meaning-making process or by the researcher. I have used the term "documentary text" to refer to the final compilation of all four types of texts, including the researcher's final synthesis of the research experience. Therefore, the final "document of life" is this documentary text as dissertation.

Analyzing and interpreting meaning as it evolves from human experience as text is an exciting activity. The signs, given by people as they live and communicate, are there. The fascination is to sense their existence, explore their meaning, and re-create, from the meaning given in the experiential texts, an understanding that often has lain implicit in our minds. That we recognize these signs in the first instance suggests that we hold tacitly what ultimately we are able to articulate.

A number of points about experiential texts must be made by way of emphasis. The embedded text and the actuality text are characterized by the singularity of their occurrence. They can only be observed and noted during the originating experience. They form the referent source of the researcher's interpretation and theorizing--they are "firstness". While as traces or fragments of reality they can be re-viewed and reconsidered, the inherent nature of the "first" experience can never again be duplicated. The exception is the replicability that is possible through video-taping of the event but it is critical to recognize that this is a selective portrayal of the event, framed by the span of the camera lens and by the researcher's eye governed by intention and intuition. It does not represent the totality of the event but only a frame of that experience. Nonetheless the significance of the embedded text and actuality text cannot be overstated.

These texts form the essential link between an individual's internalized perceptions of the experience and another's access to the meaning attributed to that experience. If subsequent interpretation is to be derived from that experience rather than being superimposed by another, we must begin at the source of the experience--with the discernible moment--as we sense it within the captured event.

The distinct advantage of retaining as much as possible of the context, action, and intent of the original experience is that we can return to that source for its most authentic form, not as memory alone but as traces or sedimentation. The power of video is its replicability which allows us the privilege of considering again and again not only the details and complexities of the original experience but also our own understanding of what had occurred.

This understanding is different from any explanation or interpretation. It is rather an increasing awareness of the fullness of the experience as it was lived. It is an appreciation of as much of the designatum, the creator(s) of the sign, the sign, and the contextual interpretant as possible, before an externally-formulated interpretant is given to that experience. For example, dialogue and action within a pedagogical relationship is continuously created by the teacher and children involved within that relationship. For them, this is experience is life, not text. They are caught up in the intensity and synchronic flux of that living. It is for them a "firstness", encompassing their actions and their thoughts as a totality. The textual nature of that experience is experienced by the observer and not by the actors themselves as they create that meaning.

It is only when they can step outside of it that they "texture" that portion of their life with explanations and interpretations, when in "secondness" they react-with and consolidate that experience. What has been described as commentary text becomes the first level of reflection on the original experience. It may include references not only to the content of the dialogue and action but also to statements or inferences about beliefs, values, expectations, associated analogies, reconsiderations, or other supportive insights. Usually commentary text is spoken but may take the form of diaries, logbooks, letters, and so on. However, it is not the actions, ideas, or products that define text but the commentaries (the telling of "what is") and the explanations (the telling of relationships, reasons, or reactions to) that do. Opportunities for the teacher and the children to describe or explain to the researcher what they are doing, how, and why it is being done, and what their actions, ideas, or products mean creates this differentiated text. In this process, they are invited to formulate what Parkin calls "a redescription and new objectification of reality" (1982:xxxiii). Further, as he states:

> This apparent merging of subject and object, of unawareness and awareness and reflection is, in fact, broken by two gaps: that between intention and experience; and that between experience and reflection or theorizing. These can be part of a sequence:
>
> intention-experience-reflection

> but as two parts (intention-experience and experience-reflection), they each can stand independently.
>
> (ibid.:x1)

It is to the researcher's advantage to separate intention-experience (or more accurately as it is observed in the classroom, experience-verbalized intention) from experience-reflection. Children in school rarely have the opportunity to convey their intentions prior to an experience but they may subsequently be asked to articulate them. This does not imply that they do not have intentions prior to action and dialogue but that, from the researcher's point of view, these prior intentions are not readily accessible until the experience has been completed, if then. This highlights further the importance of some form of documentation of the embedded and actuality text of the originating experience. Even then, the expression of children's intentions may be strongly influenced: first, by their perception of the teacher's intentions, and second, by the very process of being asked to comment upon and explain their experiences.

The same challenges follow when considering the reflexive text--the "thirdness"--which by definition can only exist because of the originating "firstness" experience being combined with the "secondness" of the commentary text. The reflexive text cannot exist without its well-spring. This reflexive text may be self-motivated or created by a dialectical dialogue between the original participants and/or the researcher. If the reflexive text is the sedimentation of an individual's life-experience, it must be recognized as such, the voice of one person articulating for himself and for others his interpretation of whatever it is in that life and in his perceptions that brings him to share his meaning. If the reflexive text is to speak of others' life experience, the author too must define his or her intentions. In human studies research, the reflexive text must clearly show its origins as derived from the meaning of persons' whose lives have created and are creating that meaning. Further, when read by others, the reflexive text invites the possibility of ever-extended meaning.

> The difficulty of this research consists precisely in making it self-critical in a positive sense.
>
> (Heidegger 1977:85)

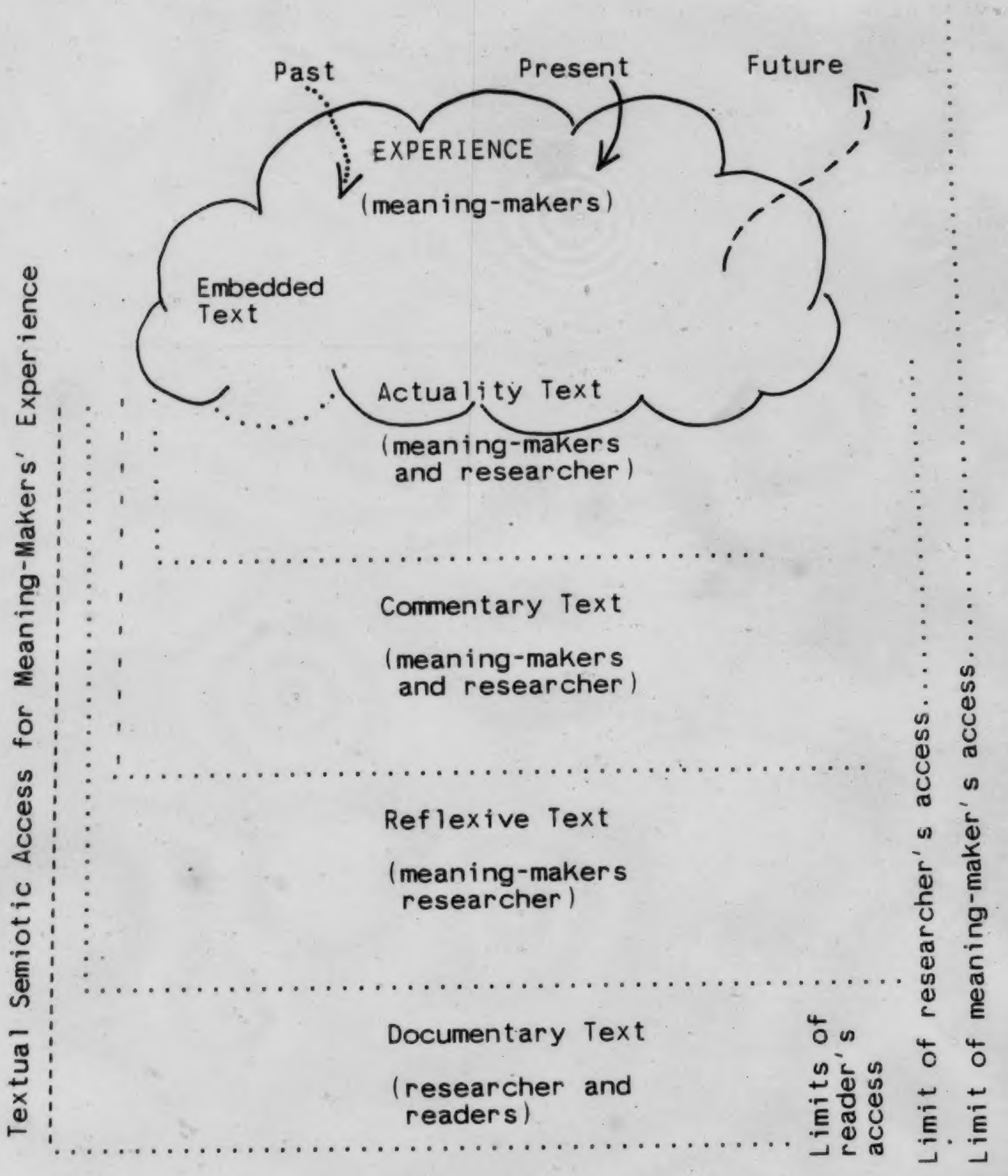
Reflexivity as an interpretive mode moves beyond description. It leads to a more detached explanation, to a fuller understanding, to a more abstract theoretical or philosophical interpretation of an experience or of a broad spectrum of life experiences. Here, thoughts about experience and about initial and continuing explanations are placed in a broader context, either in a theoretical framework or in a personal-historical-sociocultural reference. For example, the key in this study is that the teacher, the children, and I have come through the process of reflection to a deeper understanding and appreciation of the pedagogical experience. Consequently, by using transcripts and video scenes to solicit their reflection and theorizing, it is evident that "discernible moments" in their lives speak to them, and that these moments elicit affective as well as cognitive responses which outsiders can share in turn.

Finally, the documentary text is the researcher's contribution to the human narrative. Here, by using the documents of life elicited from the teachers and the children, I have attempted to consolidate thematically their pedagogical meaning as derived directly from their experiences. Each phase, from the originating experience to this documentary text, includes their meaning as the foundation from which interpretation and theorizing develops.

This intellectual play of ideas about the creation of pedagogical meaning through semiotics of the classroom is continually stimulated by explicit and implicit resonances during and subsequent to the research process. It is important to note that this documentary text took shape throughout the research process and not exclusively at its termination. My weaving of meaning began with my first encounter with the teachers and children involved in my exploratory study. The creation of this final documentary text is predicated on selective illustrations and credible explication and on the juxtapositioning of discernible moments or related commentaries with the formation of insights, implications, and theorization. Documentary text may take many forms, such as dissertation, project report, photographs and text, documentary film, or any combinations intended to be placed in the public domain. It makes accessible to others both the content of the originating experiences and the interpretation or theorizing placed upon it by the researcher-writer.

Figure 9 summarizes the emergence of experiential texts and highlights several areas that carry significant implications for research. For example: the degree to which the researcher has access to the originating experience through semiotic means, and the degree to which participants, researchers, and subsequent readers have access to the various texts formed during the research process. The important point to note is that the entire research process becomes part of the researcher's life experience, from the witnessing of the originating experience to the completion of the documentary text. What is not fully accessible to the researcher is the designatum--the life history of the persons and the affecting contextual aspects of a given situation--that is the "past" upon which the "present" and observed experience is built. Rarely too does the researcher know how their "future" also affects their life at the moment.

Figure 9 Texts Evolving From Human Experience (From the Perspective of the Researcher)


Past
Present
Future
EXPERIENCE
(meaning-makers)
Embedded Text
Actuality Text
(meaning-makers and researcher)
Commentary Text
(meaning-makers and researcher)
Reflexive Text
(meaning-makers researcher)
Documentary Text
(researcher and readers)
Textual Semiotic Access for Meaning-Makers' Experience
Limits of reader's access
Limit of researcher's access
Limit of meaning-maker's access

At least theoretically, teachers and children could see the documentary text as part of the continuum of their lives: built on their past, created in their present, and influencing their future.

However, one must be aware that reflection upon the text is itself locked within a time-frame. A later reading, even by intimates (perhaps, especially by them) may bring forward different meanings, an interpretation framed in its own psychological, historical, cultural, and social milieu. Honigmann, La Barre, and Devereux (Spindler 1979) unabashedly describe radically different insights they now bring to their own earlier anthropological studies once considered complete. As life changes, so does its traces and its text. The reader of any documentary text has only that text from which to draw meaning.

The five-phase differentiation of experiential texts: embedded, actuality, commentary, reflexive, and documentary, is intended to provide an awareness of the subtleties involved in using "what people say" to infer "what they mean". The concept of experiential texts is seen to be useful as a way of evolving meaning from human experiences by recognizing that distancing is inherent in how human beings communicate with one another. What is spoken or done in the moment of experience-creation can never be fully duplicated or documented outside that experience.

But as Gillan (1982) and Feldstein (1979) describe so dramatically, people are compelled by their intellect to give meaning to their experiences and to share that meaning with others. One might add: to record and preserve that meaning in some form or other. Our history is an accumulation of the semiotics of our time on earth. For example, the Lascaux Caves, the primary texts of the world's great religions, Eygptian hieroglyphs, Mexican stelles, Stonehenge, the Bayeaux Tapestry, the writings of Beowolf, Shakespeare, Dostoevsky, Dickens, Zola, Camus, the Angry Young men, Albee, Dos Passos, Borges, McLuhan, and Frye, the film techniques of D. W. Griffith, Gance, Eisenstein, Attenborough, and Joffre, the television documentaries of Clarke, Bronowski, and Suzuki, and the writings of young children published in the local newspaper during Education Week, are all a gesture to mark and to preserve ideas for ourselves and for others. These are our experiential texts, the sedimentation of our experience and our imagination.

Research, whether artificially differentiated as quantitative or qualitative, scientific or humanistic, theoretical or pragmatic, is also the recording of our exploration within our world and within ourselves. It evolves from and through a semiotic exploration of objects, people, and ideas. While the emphasis may change by giving priority or preference to any one of these, no research exists--can possibly exist--without an arbitrary code understood by a specific group of people. The dissemination of research depends on a semiotic broadening of a selective code to an increasingly public code. It depends on specialized meaning becoming accessible meaning.

> The very positivity of a style wrenches discourse away from being and toward a new relationship of the relation of the other... opens up the universality of the time and space in which what is spoken in discourse is turned into ideas and into knowledge.
>
> (Gillan 1982:111-112)

Using Barreman's term (1962) "the conspiracy of silence", Crick refers to the ambiguity that surrounds meaning-creation and knowledge-construction in human science research (1982:16). Unavoidably, research documentation compresses the simultaneity and complexity of observed events into a linear form from which interpretive impressions must be drawn. Dwyer (1977), for example, speaks of the delicate dialogical structure of meaning created in the field as being "resewn" into scripts (cited in Crick ibid.:17). This distancing from lived events through to the formalities of language is inevitable.

> There is a major shift here from experience to a draft of knowledge, a shift in context, style, audience....It is our responsibility, ultimately, to know "what we are about".
>
> (ibid.:27,31)

Knowing what we are about in human science research may be enhanced through a two-fold interpretation, a re-consideration of the research process. As Parkin (1982) and Ruby (1982) emphasize, we are caught in an ontological hall of mirrors as we reflect upon those we study and their reflection back upon themselves, upon us as researchers, and upon our influence, impact, or interference in their lives. They reflect on meaning that is now more complex because that meaning has being drawn into focus by our activity and by the meaning of our presence in their lives. Naivety becomes complexity; complacency becomes curiosity, even a compulsion to understand more. Semiotic waves (sign systems tumbling over sign systems) ripple through ideas, creating other waves, other signs, other revelations, new understandings.

Parkin maintains that reflexivity in the research undertaking is not complete until the researcher examines his own dialectic within the process. This requires more than the fine art of latticed description (ibid.:xiv). It is here that the differentiation of experiential texts is important, not as a way to categorize meaning but as a way to clarify its source and circumstance. Founded on the recognition that meaning is highly symbolic and intersubjective, the notion of experiential texts seeks to identity meaning-makers at specific stages of meaning-creation. It attempts to examine the semiotic means by which that meaning is shared as explicit expression--how meaning is created. What are the traces of meaning and what do they signify? What is "the saying", and what is "the said"?

But equally important: Who is "saying", in what context, with what intent, with what meaning? Until this is understood, research within human experience will not see where and what meaning is being generated and will only skirt the issues that create understanding.

Man does not live as an abstraction. He lives saturated in meaning of his own making. To impose meaning on him is to deprive him of his own integrity. To explore his meaning is to enrich his understanding and ours. To tease out the essence his meaning is to add to the human narrative in a way that can never be accomplished by ignoring it. We must listen for the nuances of human experience. We must be aware that each step we take draws us closer to its meaning or moves us further away from it. Experiential texts may be a sign--an index--like runway lights on an airfield: not needed when we see clearly, but critical when we cannot.

The Video-Camera as a Semiotic Experience-Maker

> The human body has a language all its own. It is a language that needs no sound to voice feelings. The mere tilt of the head or the look of an eye can speak volumes. To translate the silent eloquence of the body onto film, one needs a...camera capable of recording the subtlest of moods to the most flamboyant...to take pictures that speak for themselves.
>
> (*Equinox* March/April 1985, back cover)

Because the video-camera became my silent partner and participant-observer on my visits to the elementary classrooms, it is important to include a discussion of its critical role in the collection of pedagogical experiences. The taperecorder, though equally valuable, is less intimidating because it is much less obtrusive. The sheer physicality of the video camera and recording equipment makes them formidable additions to a classroom. Other than working in demonstration-classes housed in specially designed classrooms with inconspicuously mounted video cameras (rooms which create their own artificial environments), bringing video equipment into a school becomes necessary. This act starts a wave of excitement from the moment the researcher arrives in the parking lot and starts unloading.

Nonetheless, encouraged by the success of my exploratory study and believing in the value of video tapes as a research medium, I decided that once I had become acquainted with and accepted by the classroom, I would bring in the video. Consequently, video tapes of classroom interactions along with observations notes and audiotapes form the primary source material for this study.

The video camera is a semiotic instrument with its own code of conventions and techniques that govern its use and the results of that activity. When the video camera scans the entire classroom, it records the context of pedagogical interrelationships quickly and with precision. Physical relationships, movement, action, ambience, dialogue, and the complex of nondiscurive communication can all be recorded and repeatedly analyzed for the smallest detail.

However, the presence of the video camera makes the situation within the classroom different. The semiotics of personal interrelationships, the use of space, and pedagogical emphases and sequencing can be directly affected by the presence of the camera. Being filmed *is* different from not being filmed. Some argue that there is no significant change in behavior and language. Others argue that change is inevitable. My observations must agree with both sides of the issue. Camera-consciousness is a real phenomenon, with its particular range of semiotic behaviors provoked by the sign and function of the camera. But camera-consciousness also tends to be relatively short-lived and is displaced by the momentum of classroom life.

This is a trade-off that the teachers and in particular Mrs. Wayne agreed to accommodate. This single agreement was an act that gave a richness to my interpretation that could not have been obtained in any other way. The video-tapes become my memory bank, perpetuating my initial semiotic curiosity and expanding it immeasurably.

The Semiotics of Film

One division of the broad and interdisciplinary field of semiotics is that of cinematography which attempts to examine the sign systems inherent in the production, editing, and public appreciation of film. Worth and Gross (1981), Heider (1976), and others accept that there are basic capabilities of the camera and the editing machine that suggest a code, a sign system associated with film. They are careful to differentiate between the relatively stable (though changing) consistency of the grammatical patterns of any given language and the infinite and individualistic creative use of the camera. Nonetheless they agree that there are modes of filming that can be extrapolated semiotically. While not a formalized language, these modes can be useful as codes whose interpretation can lead to a greater understanding and appreciation of the meaning within film and of life experiences.

Supporters of the semiotics of film refer to the technical versatility involved in the use of a variety of lenses, techniques of dissolve, flashback, multi-images, montage etc. as part of this repertoire, this language of film. In considering audience interpretation of film, they maintain that a sign system is also operative: the assumption and acceptance of space and time beyond the screen image (of rapid cuts from one scene, person or location to another), the suspending of reality in the acceptance of fantasy as real, and the interpretation of close-ups as significant to the plot. Eisenstein's work in the 1930's (1975,1942), in particular, led to the concept of film language and film technique as elaborate and powerful sign systems. More recently, Metz (1974) and Lotman (1976) are advocates of the semiotics of film.

Hervey (1982), on the other hand, takes exception to these arguments and points to "semiotic fallacies in cinema analysis". He argues that film is not necessarily communicative but rather may be accepted as an observation of everyday reality, and that film images are more representative of direct visual presentation rather than signification. Further, he maintains that the elements of film are not commutable or replacable as are ordinary semiotic objects such as sentences, and that underlying variety, not underlying constancy, is characteristic of film and, therefore, not representative of "a systematic inventory of units" typical of semiotic analysis (ibid.:242-243).

Despite the polarity of theoretical analysis, I find it useful to refer to a broad interpretation of the semiotics of cinema and I describe some of the issues involved to my filming and analysis of videotapes in these terms. This has been a useful guide in my role as cameraman and as researcher, particularly since once filming is completed there is seldom a return possible. Even if it is, the scene and circumstances have changed, the dynamics are different, and the last experience has cast its influence onto the present one where previously that experience itself was novel. Equally important, semiotic insights offer perceptions that during the editing process safeguard the integrity of the original filming and the attribution of meaning.

The Video-Camera as Participant-Observer

To understand the analogy between a person and the video camera as a participant-observer, it is necessary to set the scene. With the ever-increasing popularity and success of qualititative methodology in educational research, the concept of participant-observer is commonly adopted as an approach for information-gathering. It is accepted that there are degrees of involvement possible and desirable in any given situation. This involvement may range from full participation where little if any distinction is made between those in whose life this observation occurs and those who come to observe, to situations in which the observer is distinctly apart from the persons and activity he intends to observe. Between the extremes of this continuum is the position where the observer role equals that of the participant. Each situation calls for or allows a unique degree of involvement between the researcher and those who would contribute to his understanding in a particular area of study.

McCall and Simon (1969), Shutz (1973), Spradley (1979), and others accept the idea that a participant-observer is one who is not naturally a part of the setting but who by some agreement is now directly involved and affects the course and consequence of events. My minimal direct involvement as a participant-observer in the classroom activities has been described elsewhere (infra:71). Canter and Brown (1981:221, 242) have evolved a model that differentiates the role people might and do assume when associated with an event. Specific roles are determined along two parameters: the degree of involvement (incidental, social, or personal) and the degree of expertise (having information which is publicly available, special to the situation, or discrete).

As background information, within these two areas I would designate myself as having been involved at the social level, in that I maintained an interactive social relationship with the teachers and the children. For example, during formal lessons orchestrated by Mrs. Wayne, I did not become involved other than as an observer. During general classroom activities, I waited for the children, Mrs. Wayne, or other teachers to initiate any interaction with me. During field experiences, a more casual approach was possible. In Canter and Brown's terminology, my degree of expertise in observing pedagogical interaction between the teacher and the children is "discrete"--specific to education. This brings advantages and disadvantages to the situation. Does the insider "see" as much as an outsider would? Who is better able to interpret in the context of the event? As I became more and more familiar with the teacher's approach and the children's backgrounds, I accumulated information "specific to the situation."

Canter and Brown also describe the observer as representing a particular mode of expertise which might include the neutral observer, client, victim, consultant, witness, expert, specialist, or occupant. During observations, I tried to remain a neutral observer, withholding judgments about what was occurring. During analysis, it was inevitable that my judgments did come into play. As I took the semiotician's perspective with greater assurance, there was an increasing degree of specialization in my observations. At the time of video-taping, I took the role of a deliberate witness rather than a neutral observer. I was "looking" for general impressions and details in a foreshadowed perspective, i.e., semiotics. As Canter and Brown emphasize,

> The nature of any ordinary explanation will be a function both of the involvement and expertise of the people providing the explanation.
>
> (ibid.,236)

There is no question that the presence of technological observation equipment such as the taperecorder or the video camera implies to those being observed that "We are being watched!" to a far greater degree than when the observation is done exclusively through the researcher's eyes. This can be and often is coupled with the excitement of "We're on camera!" We're on camera!" In many ways, the video-camera with all its intriguing accoutrements and possibilities takes on the guise of a participant-observer. Its presence in the classroom is an influencial and influencing factor in the shaping of events. Its sheer physical presence usurps a space normally free or utilized in some other way. Where the camera is and where it goes, the children cannot. For the duration of the video-taping, that space is not reclaimable. In some cases, the equipment occupies the reading area. the library corner, the craft area, the front of the classroom, or the area that functions as the foyer to the classroom. Consequently, classroom activities literally "work around" the equipment, a limitation not normally affected. The cables and cords too create a writhing network underfoot while the tripod and camera tower over the children.

While the researcher may be accepted as another "teacher" (and for most of the children in many schools the student teacher is a familiar, and accepted person), the technological "eye" of the video camera brings another semiotic connotation. Because it "sees", it becomes personified by the children. Although similar to their home televison and VCRs, it is nonetheless "a stranger" and one with which the children have little or no code of communication. Some children want desperately to "get-acquainted" with this technological stranger.

Children's Curiosity about Video Technology

In Mrs. Wayne's grade four classroom, the children are working on independent assignments. Nancy finishes hers and comes over to where I have the video camera and recorder set up. It's about a month since I first introduced the video camera to the class (on my seventeenth visitation to the classroom) and began video-taping. Nancy asks if she could look through the camera.

[Why do you want to do that?]

> Nancy: Well, I just like to...Like my friend has one and her dad always films and I always wanted to try to film and see what I could film. So I decided that maybe I could film without any film in it.

[Just to see it on the monitor without actually recording?]

Yeah. Can I please?

Then Adele finishes her assignment and very quietly comes over to the camera. While I sense what she wants, I cannot resist teasing her a little.

Adele: Can I try that thing?

[Do you want to try using the camera?]

Yeah!...I want to know what it is like.

[But you are in school. Is that "learning"?]

Sure it is!

[Does that mean you have spare time? I thought there were things you were supposed to do in spare time?]

Oh that!....But I want to try this.

Nancy: {reading Free Time List}...Do a think-about-it-card. Write in your diary. Write creatively. Do S.R.A. cards.

Adele: {giggling sigh} No...I want to try this!

Nancy: {pointing to the tripod} Will this thing go down low?

[Yes. You can't see through the viewfinder the way it is, can you? See if you can figure out where on that tripod is the...]

(interrupting) Here!

[No.]

Here?

[Try it.]

{finds right knob}

[Tell me what is happening.]

It is going down! Down to size.

[Down to whose size?]

My size!

[Why is that better?]

So I can see!

[Why is it better for most of the shots to be taken from that level?]

Hm?...Well, so short people can see.

[Who's short in this room?]

Adele: Me!

I guide the girls' experimenting with the camera's pan and zoom action.

Adele: I can see the snowflake really close! Neat! {referring to snowflake mobiles hung from the ceiling} Gee! Thank you!

Nancy: I can hardly wait to tell my friend in the other room!

Later that afternoon, Nancy comes up to me and asks if she can read a story into my taperecorder.

Nancy: {reading what she had written in her spare time}:

Mrs. McKie and the Video Tape

> She went around the room, filming. She told us to act natural but I couldn't because I kept turning around to see what was happening. Then I would be filmed. She let some people to work the camera. I did that. It was neat!
>
> The End

To provide an orientation for the whole class, I demonstrated the possibilities on various camera action with scenes of the children's faces on the monitor and gave them frequent opportunities to watch classroom activities being video-taped. Later, many viewed a selection of these scenes. The most successful incorporation of an understanding of the video equipment and the filming process occurred during my exploratory study when the grade two teacher selected as her language-arts lesson, a listening activity using an audio-tape and accompanying worksheet that told the story of a news-cameraman working for a television station. There is a delightful synchrony as the children listened to the tape and watched as I pointed to the various features on my equipment: microphone, zoom lens, volume controls, switches, and dials. They then checked the diagrams on their worksheet and labelled the parts illustrated. This proved to be a very effective introduction to the technical curiosity in their midst.

There is a further paradox, however, in the presence of the video camera in the classroom. While the video camera cannot participate in the children's activities as an adult observer might, i.e., on the human interactive level, its lens does record the intimacy and intricacies of the events taking place before it.

An example included in Appendix #4 illustrates the kind of analysis that is possible in a 5-minute exchange between four children on a kindergarten climber. Within that brief time-period, three separate events occurred. They happened so quickly that the human eye (if it had been focused on them) would likely have missed the details. The camera didn't. Yet that particular episode, brief as it is, captures the volatile nature of human relationships and the complexity that faces a teacher if she is ever required to determine "who" did "what" to "whom" and "why". In this instance as in so many others, the camera took far more meaningful "observation notes" than I possibly could.

Finally, in terms of the children's understanding the intent of the research project of which they are a part, several important points come to the fore. No matter how diligent the researcher is about giving full information to those who participate, there will be some uncertainties in how people understand that information. For example, the day after I have started video-taping in the classroom, Brian met me at the door in the morning and said his family had watched television the night before because he thought he would be on in scenes I had video-taped. When I asked, "Do you understand now?", he said, "Oh yeah! I just got mixed up."

On the other hand, when I asked Tony why I was video-taping in his classroom, he virtually told me what I had read aloud to the class and sent home in the original letter to the parents. (Appendix #1)

[Why do you think I tape kids on video?]

> Tony: 'Cause you want to know how the kids react to what the teachers says and stuff... What do we do when the teacher tells us something. You are just wondering how the teacher communicates with the children.

[How does the video tape help me do that?]

> So...like you can see it better and hear it better and see the actual action...instead of just the taperecorder.

[What does the video give me that this taperecorder can't?]

> Pictures! So you know the actions that they do.
>
> Sarah: {joins in} And so you can remember the people.

[Yes, that certainly helps me too.]

> Nathan: Maybe you should film some of the posters around the room. Like this kind of thing....Because I think they are nice. Some things are really neat things. This book has pictures of weird people.

[What would that tell me about school?]

> Those pictures would tell you about what we have read in school. I think that's important, sort of.

Rob's behavior perhaps best demonstrates the opinion of the majority of the children about having the video-taping occur in their classroom. In a conversation with Mrs. Wayne, after the first day with the video-camera, I commented that:

> [Rob came back here with quite a number of the other children and I was asking about the effect of the video-camera being here. He started to say..."Mrs..?.." but didn't remember my name. Then he stopped. I waited, knowing he was rather shy.
>
> But he wouldn't say anything more. Others were trying to help him and he kept shaking his head. No, that wasn't what he was going to say. Somebody said, "You re shy? You're nervous about being on t.v.?" and he kept shaking his head. Finally he blurted out, "No! I'm happy!"
>
>> {Mrs. Wayne laughs} Oh, that's good!...I noticed too that Lisa just stayed with you and the camera for the longest while. She was the only girl there but she certainly was interested!

So it was that gradually over time the children and Mrs. Wayne came to know the video-camera and accepted the apparent inevitability of its presence in the classroom. Except when I filmed throughout an entire week, I removed all the equipment from the classroom and brought it in only on the days that I had scheduled with Mrs. Wayne for video-taping. Before long, the children and Mrs. Wayne had accepted that the video camera and the recording equipment were synonomous with my presence in their classroom.

Children's Awareness of Camera and Self

Most people have a sixth sense about being watched by others. A child's awareness of the camera focused on him is easily observable. Whether or not this significantly interferes with his concentration or with his relationship to his classmates is not as easily discernible. Heider (1976), writing on ethnographic film, quotes Kendon and Ferber (1969:51-52) as saying that their subjects were "almost completely unaffected by the camera". On the other hand, Carpenter (1972) filming in New Guinea (where resistance of self-portrayal by camera may have come into play) states that

> Almost invariably, body movements became faster, jerky, without poise or confidence. Faces that had been relaxed, froze and altered between twitching and rigidity.
>
> (ibid.:138)

Patricia Loud describes her reactions to being filmed as a shifting into a camera-persona. She refers to the Heisenberg Principle whereby "anything observable is changed by the fact of being observed....We all became charming, amusing, photogenic, and generally irresistable." (1974:102 cited in Heider ibid.:53).

This behavioral shift was certainly evident during my video-taping in the classrooms. Although I did not verify it by questioning of the children who had exhibited camera-consciousness, the video clips themselves given ample visual evidence. The children's facial, gestural, and body movements as well as their audile comments permit an extrapolation of their feelings, brief and fleeting though they may be. As Worth and Gross (1981) and Heider (1976) point out, there is a need for research into the effects of the camera on subjects. This is particularly true in light of the volume and magnitude of interpretations drawn from video-scenes in psychological, sociological, anthropological, and educational research. A haunting thought is that these interpretations may be drawn from superficially-created contexts rather than from primary and unaffected ones. The power of the presence of the camera is extremely difficult to account for and evaluate. Yet it gives us access to much that we would not otherwise understand.

For many children, the excitement of seeing themselves on the television monitor is a happy circumstance. My most successful experience with children and camera occurred during an open-access approach I used with a class of grade one children. The monitor was turned toward them for easy viewing. I then focused the camera briefly on each child individually, zoomed to a close-up and then out to show the child in context again. The children were fascinated. This sharing of self-and-others brought exclamations of delight, good-natured teasing, surprised dignity, super-casualness, shyness, or barely-contained excitement. Each child gave a unique reaction. Eachone wanted to be "on camera" and "to be seen", yet each was a little startled when his or her image appeared on the screen.

We are accustomed to seeing photographs of ourselves in the "frozen scene" in which time and action are stopped. Gradually, with the availability of personal video-camera-recording equipment, more and more people have the opportunity to see themselves "in action", in a context much broader than has been possible before. This duplication of self-in-life is a new semiotic. For many of the children participating in this study, this was the first experience of its kind. The line between what is real, i.e., me sitting here in my desk looking at the camera, and what is not real i.e., the image of me--life-size and in natural colour--there on the monitor, is blurred. This proximity of my-moving-image to me is a new visual experience. It takes a cognitive shift to place the visual, emotional, and illusionary aspects of this together.

> Mrs. Wayne: They are not used to seeing themselves and their behaviour. It's like hearing yourself on the taperecorder for the first time; you sound so different. When they see themselves on the video monitor (on T.V. is what they are thinking) they look different to themselves.
>
> They can't see themselves in that context. All you ever see is a picture of yourself from the front. You never see yourself from behind or from the side. All you'll ever see is what you see in a mirror but when you are working, you can't even see that.

Even when teachers resumed their lessons and the monitor was turned away from the children, their curiosity frequently overcame them. Many would find some mission to complete that brought them into the vicinity of the monitor for a blatant or "stolen" look at what I was video-taping. Inevitably, their subtlety to this point disappeared. "Heh! Mike! You're on televison!" Mike would look up from his work, distracted and pleased, but breaking the inherent context of the scene being filmed. There was a general feeling of privilege when a classmate was "distinguished" by being "on camera".

> Oh, definitely they like it! But they are just as excited when they recognize other people too. Russell kept saying over and over "That's you! That's you!" [referring to the teacher]. He was just amazed that other people were on there.
>
> (Kindergarten teacher during the viewing of selected video scenes of her class in May, 1983)

***

> Mrs. Wayne: It's been great for my class. It's good for them to be important. They were so excited when I told them about why you were here and what you planned to do. And I'm sure you heard them telling all their friends as soon as they got in the hallway at recess. I guess it was bragging but they were so thrilled!
>
> I think it's a benefit for them. In terms of self-concept. They feel important. They've been on T.V.! It's something we all want. We want people to notice us. So if they're in something like this, they're being noticed!

***

Melinda: [kindergarten girl watching a video scene of her classroom] Oh! There's me! There's myself, doing a picture. {pause} I look good there.

[Yes, don't you!]

Yeah! {continues watching} Oh! There's Kyle...and Chad...and Ronny! and Ronny again!

***

Kathy: [grade four] Look at Roxanne! {referring to the video scene before them}

Carmen: Look at Jimmy!

Kathy: They look funny!

Carmen: It's funny to see them suddenly like that...frozen!

[That's because I stopped the frame.]

Carmen: Yeah, but it's a funny picture!

***

[How do you feel about having all this camera equipment in the classroom?]

Nancy: Good!

Adele: Hm! It's nice to be on film for once.

[But you know it isn't broadcast publicly.]

I know. It's just nice to see yourself.

***

Marie: When you were filming us, we thought that if we looked up, then we would get embarrassed and then we would see ourselves.

[Are you saying that when the camera is up there, it makes you behave better?]

Yeah!

[Really?]

{Chorus of children} Yeah!

For some children, the video camera in the classroom is not a novelty. They are familiar with it in their own lives.

[Would you like to see yourself on the video?]

Tony: I already saw myself.

[How do you feel about it?]

I don't mind it. Because my uncle's got one of these. I was in barefeet in the summer and I had to sing this song and as soon as I was finished, my feet got really hot because the wood on the deck got so hot! Oh! That hurt my feet. And he pointed the camera at them!

For other children, it is a special experience: an experience of the self--the image of the self in public.

[Tell me. Why is Marie combing her hair in this video scene?]

Tony: I don't know!

Danny: I know. For the Remembrance Day assembly.

[Why is it important to look nice?]

Ricky: Cause...you don't want to look ugly.

Don: When you go in front of everybody, it is best to look nice. Unless you want to say "Oh-yugh!" at somebody.

[But why couldn't you just be your ordinary self?]

> Oh, because, that would be pretty bad!
>
> {Everyone laughs.}
>
> Well, look! {waves hands around group and everyone laughs all the louder}

In a world filled with visual significance, it is not surprising that the children should be thrilled with seeing their own image on the screen. Their image projected from the televison (video) screen is a sign of prestige. It is on just such a screen that their favourite actors and their favourite and not-so-favoured programs appear. If the screen can hold A-Team, Knight Rider, Masters of the Universe, Webster, and Charles in Charge, it must be important. "If _I_ appear on the screen, _I_ become important too."

During the video-taping, there were children who actively petitioned for the camera to be focused on them. In stage-gestures and stage-whispers, they begged, e.g., pointing to their desk, miming "Here! Over here!" The more uninhibited deliberately moved into camera range to give the classic both-hands-wave and "Hi Mom!" effect or to "pull" any one of a remarkable repertoire of "funny faces". Others gave a casual wave to the camera, and went on to their work. There is no question that the presence of the camera changed their classroom environment and, at least temporarily, their behavior. But these antics-for-the-camera occurred primarily before formal lessons or during transitions from one room to another and seemed a necessary semiotic relationship between the video camera and the children. It is as if: If I cannot control the camera's looking at me, I can control (if only briefly) what the camera will see.

In most instances, teachers handled these behaviors lightly and quietly said, "Sit down, please." "I doubt that that is what is wanted." "Quit your clowning." or "Cut it out, Andy." On one occasion, a teacher reprimanded a persistent "ham" and addressed a general comment to the class requesting them to: "Try to imagine that the camera isn't there. I know it's hard but do try." Not unexpectedly, the class virtually nodded and complied.

In general, these enthusiastic responses were motivated by the power of the camera and the children's fascination in seeing images of themselves and their classmates, their teacher and their classroom--all their familiar world--reflected back (on what for them is synonymous with commercial television). The video camera in their own classroom created a heady mixture of excitement and embarrassment.

However, not all children were equally enthralled nor as uninhibited. Others were simply matter-of-fact about it all. Sensing the camera was focused on them (a fascinating study in and of itself for there was no sound associated with the movement of the lens from normal to zoom), some would briefly look up, acknowledge the camera, and resume their attention to the matter at hand. Occasionally, a slight frown might gather, perhaps indicating, "Why me?...Well, okay then..." For these children, camera action seemed to be accepted in passing. There may be, of course, more to be understood from those ambiguous looks but it is not possible to abstract the nuances. Children who later volunteered to look at the video tapes were pleased with images of themselves. However as "volunteers", they cannot provide us the thoughts and feelings of those who did not participate. As always, the quiet child who might have the most to tell us does not bring himself nor his ideas and opinions forward.

Lisa is more concerned about how the video-tapes will be used once they are filmed. I returned to the school after the Christmas Break to complete another month of video-taping. I planned to conduct a series of interviews with the children as they viewed selected scenes of their classroom activities, and to video-tape children who wanted to act out scenes as a teacher. Lisa came up to me one morning.

> Lisa: My mom wants you to let her know when you will be filming me.

[I will.]

> And then you are going to show the kids what I did? [referring to her future acting as a teacher]

[No. Not that part.}

Oh! {sign of relief}

[No, just something from the class.]

Oh. What?

[I'll just pick out some scenes of something that the class was doing. I haven't done that yet. I haven't decided yet.]

That's okay.

Lisa suggests that there is an area of privacy that she (and by implication her mother) wants preserved in any individual video-taping that I might do with her. Viewing herself as a member of the class would be acceptable; allowing others to view her "acting" scenes would not. In requesting permission, I had used the broad spectrum statement, "to be used for educational purposes only", but Lisa needed reassurance of this and to know that her classmates would not view scenes of her teacher-performance.

Some children found the presence of the camera as an all-seeing eye particularly troublesome. They seem disturbed by its power: It imposes. It controls. It finds me regardless. On several occasions, different children would suddenly cover their work by dropping folded arms over it so it could not be seen by the camera, a gesture that implied: This is private. It is not to be viewed or judged by the camera or you. Go away. Occasionally, a child would shake his head and turn away from the camera, not wanting (or needing) to be filmed.

Perhaps the most poignant example of the effect of the intrusion of the camera into the privacy of an individual occurred when I focused on Kirk, a grade two child who had raised his hand in response to his teacher's question addressed to the whole class. Sensing I was video-taping him from my position from the side of the room, he hesitantly lowered his raised arm (furthest from the camera), paused slightly while still looking ahead, then slowly raised the arm nearest the camera (to continue his message to his teacher).

Deliberately half-hiding behind his arm, Kirk turned and looked into the camera lens with a long querying, confused look. For a moment, he held the position. Then, tucking his head into the crook of his arm and holding it there, he slowly lowered his arm onto his desk. Then very, very slowly he turned his head away from the camera. A child hurting. Not knowing how to escape, he had given a look into the camera that did not forgive. Poignantly different from the child who ducks behind his hands but peeks through his fingers to see if you are still video-taping, and different from the child who "catches" you and tosses it off with a sheepish grin or a bravado glance.

Here, in one small gesture, a defenceless child raises the ethical issues of filming "natural events". His implicit gesture magnifies the question of the weight of adult research juxtaposed with a child's vulnerability, and the justification of adults' "permission" to film the child against the child's own right to privacy.

Haunting questions are enmeshed in these boundaries of validity, reliability, confidentiality, research priorities, human rights, and the sanctity of the individual. Perhaps our awareness of and sensitivity to "a child on display" is our best and only defence against charges of insensitivity and intrusion. In those few frames of video tape, Kirk reminds us that there can be emotional stress involved and that the children in the classroom may pay the highest penalty for our research privileges.

However, without negating the importance of respecting individual rights to privacy in any way, it must be pointed out that the incident (while an invaluable illustration), was the only one of its kind: the only one where there was visual evidence of an open reaction to the camera's trespassing into a "personal emotional space" or, more accurately, creating a space of tense emotion around the child. Another example more appropriately discussed elsewhere (infra:736), suggests that even in a moment of emotional complexity the camera's presence may be sensed...but accepted nonetheless.

Following video-taping in the classroom, a number of children volunteered to view selected scenes and comment on them. In the exploratory study, far more children volunteered than could be accommodated. To have been selected was generally regarded as a privilege. Invariably, those who did participate were delighted to see themselves on the screen, to recognize their friends, and to openly comment on the events portrayed. They enjoyed the experience very much. For them, camera-consciousness took a different form from that experienced by some of the other children.

Perhaps Don best epitomizes the reaction of the majority of children to my video-taping their classroom life.

> [How dio you feel when I was in the classroom with the video camera]
>
> > Don: Oh! I didn't feel bad. Maybe a little bit nervous. {Laughs}
>
> [Did it bother what was happening in the classroom? Was I a nuisance? You can say so if I was.]
>
> > No! I didn't mind. It was just like a regular...let's see if I can think of how to say it...It was just as normal as usual. Except I had a little bit nervousness. I don't mind you at all.

Initially, children are intrigued by the camera's power. By far, their reactions are sheer excitement and pleasure at being important enough to be video-taped, at seeing their own images on the monitor, at "acting-up" for the camera, and later and more seriously, at "acting-as-teacher" for research purposes. But beneath that excitement is a little apprehension--a mixture of uncertainty about how to act and what a camera will "do".

However, for most (though not all) children, the novelty of the experience wore off over a period of time.

> [You asked me how long I would be coming to your classroom with the video camera. When I said "For January and February and then in May and early June, what did you think?]
>
> > Sarah: I like you being here. I like you taping us and that.
>
> [I thought maybe you got nervous or thought it was a nuisance. But you are saying that you like it?
>
> > Yeah!
> >
> > Matthew: I don't get nervous. I'm used to it.
> >
> > Adele: Me too!
> >
> > Nadeen: {doesn't say anything but shrugs her shoulder as if the video camera does bother her}

By late November, a month and a half after I had introduced the video equipment into the classroom, I had filmed fifteen one-hour videos. Then after a week's intermission, I began again. By now, as Mrs. Wayne explains:

> They are getting pretty casual about your being here with the camera and everything. I expected, at least during the opening exercises this morning, that they would all be peering over there. I was watching, but they really weren't.
>
> I don't even think they think about it any more, most of them. The odd one still does. To see yourself on T.V.! They are still excited about it. But by now, it's there and

> you are there and it doesn't matter. It just another person in the classroom. That's fine.

One day when a January blizzard was more than enough to cope with, I did not bring the video equipment into the classroom.

> [What did you think today, when I didn't bring the video camera?]
>
> Nancy: I thought it was weird. Because I am so used to having the camera.

One final observation is relevant. I was video-taping classroom interaction during "sharing time" of the Writers' Workshop. There was a lot of movement as children read their stories to one friend and then another. A number were waiting to read their stories to Mrs. Wayne. In all of this, Bonnie was in her desk reading a book, an island onto herself. This incongruity attracted my attention and I zoomed the camera in on her. Marie who doesn't miss a thing looked at me, at the camera, and at the monitor. She rushed over to Bonnie and stood there in a pose that said, "I don't want it to look like I'm telling you, but...". When she whispered out of the side her mouth, "You're on camera!", Bonnie looked up from her book and matter-of-factly said, "So what?", and went back to her reading. At least for Bonnie, the excitement was all over.

The Forgotten Rights of Children as Video Subjects

It is the children disturbed by the camera's presence who provoke an ethical question rarely considered in educational research. The procedure and sequence of obtaining permission to film them rests entirely in adults' hands. Administrators, coordinators, teachers, and parents sign permission forms. The children are never asked. It is hoped that on receiving the request parents will discuss the implications of participating with their children. Some may not. Of the more than two hundred and thirty children I filmed during the exploratory study and the major one, only one parent refused permission for her child to be filmed. When his movements about the classroom inadvertently brought him into camera range, those clips were erased from the video tape, and he does not figure in any interpretations given of classroom life.

No parents called for further clarification of my project although the information letter invited them to do so. One parent called to request a chance to view her child's "teacher" performance. This was arranged to everyone's delight--child, parent, and researcher. What a small percentage of explicit concern? (1.3%, if calculated on a one parent representation for each child; .65%, if on two).

In one sense, this represents the implicit trust that parents place in the school system--that it will sanction only those experiences that are appropriate for their children. There is a certain expediency in this kind of trust and little reason to question it if the children are reasonably happy with their school life. On the other hand, there is a semiotic weight given to the sanction of the university, school board, principal, teacher, and researcher in approving such a research project. While reassuring everyone that I honoured a basic integrity in the design and execution of this study, I question whether such approval should be so conveniently given.

More disturbing is the assumption made by adults that the child will participate without any recourse to being excused totally or at will from such an undertaking. As all other researchers, I filmed to my heart's content. Even the children gave me implicit authorization.

> [If you were doing my project, what do you think would be important to film?]
>
> > Nancy: Well, children. And the teacher. And filming children writing and making things. Or coloring or...?
>
> [Is there something that you know I haven't filmed that I should include?]
>
> > Well...I don't know. I guess not.
>
> [How about you, Adele? Can you think of something I haven't filmed that I should include?]
>
> > No.

In the video scenes I showed to teachers and children, I edited out scenes of nose-scratching, clothes adjusting, and any action that placed the child in an uncomplementary light. But I did use scenes of children's misbehavior, their reprimands, their sullenness or rebellion, their annoyance with others, i.e., all the details of relationships that seemed to have some as-yet-undiscovered significance to the semiotics of pedagogy. If I had not included these, I would have presented only a "sunshine story", one not fully representative of classroom life as it is lived. But the decision to film or not is rarely made easily, particularly if there may be any question of transgressing on a child's right to dignity and privacy.

Video-Taping Children Acting as "Teacher"

Included in this study was the opportunity for children who wanted to volunteer to demonstrate to the camera what they thought it was like to be a "teacher". Fourteen children in the exploratory study (April 1983), and nine children in the grade-four study (during May 1984) participated in this portion of my research. Their willingness and eagerness to perform individually before the camera confirms that it did not intimidate them. The first series of tapings occurred in an unused classroom which contained a teacher's desk, a number of children's desks, several tables with books, a blackboard, etc. In the second series, the children's regular classroom was used during pre-school, recess, noon, and after-school periods, and when scheduling was only possible during school hours, in a small, crowded art-supply room or in the nurse's room. Interestingly, the children's creative enactment did not suffer in the least from being video-taped in these unusual settings.

The children came individually to perform although their friends were often waiting outside. The instructions were similar for all the children.

> [I'd like you to go outside the room, close the door and then come in as if you were the teacher of these children...See all these children in their desks?...{None of them had any difficulty visualization a roomful of children}. How would you begin the day? And what would you do?]

Often, very spontaneous enactments were given. But if they had some difficulty in deciding what to do, I provided cues about possible scenarios that might be used. No child was told specifically what to do. Only (if suggestions were needed), "You've just come into the classroom and it's time for the reading lesson." or "There's a girl in the third row blowing bubble gum. What would you do?" or "What does a teacher do at the end of the day, when the children have gone?" Interestingly, the younger children needed less prompting. For example, three kindergarten children instinctively followed their own teacher's procedures for deciding what action-song to sing, and how it should be performed. They mimiced their teacher in giving instructions for making a craft project, and in disciplining. They seemed to find assurance in knowing and following her familiar routine. It was obvious too that they enjoyed being teacher.

Older children (grade V and VI) tended to use their teachers' explanatory rationale along with physical mannerism and positional stances in relation to imaginary students. Their lack of self-consciousness before the camera gives graphic illustration of the impact of their teacher's verbal and nonverbal behavior, and of the children's understanding of the role of the teacher and the pedagogical process. The analysis of this material has been only exploratory but it suggests a rich potential for further research. While not an ultimate solution to investigating the ongoing dynamics of classroom activities from the teachers' and learners' point of view, this volunteer-video-enactment approach does offer an attractive alternative.

A number of examples are given in the Appendices:

> A kindergarten girl as a teacher presenting a printing lesson - Appendix #5
>
> A grade three girl in a revealing portrayal of her teacher's personal mannerisms, i.e., holding a book in a distinctive way, sipping from an imaginary cup of coffee, removing a "bad boy" from the classroom and then reinstating him - Appendix #6

A grade six boy teaching a concept (presumed
to be totally unfamiliar to the pupils)
Appendix 8.

The Teachers "On Camera"

When the teachers agreed to appear on camera (either voluntarily or after being coaxed by their peers to make a professional contribution by participating), they opened a way for me to investigate the semiotics of the classroom. From comments made about the video-taping, teacher's concerns fell more in areas of the portrayal of professional competency rather than on accommodating personal ego. They were concerned with planning activities, sequencing, and in presenting what I as researcher wanted. This concerned them despite abundant reassurances that what I wanted was whatever happened in the classroom in the ordinary course of events.

This is not to deny that teachers' self-portrayal was not important to them but rather that it was secondary. When they viewed scenes filmed in their classrooms, their responses included comments like: "Did I really say that to Martin?!" "Do I use my hands that much? Do you suppose it helps the children understand better? Or it is distracting?" "Say, that was a pretty good answer from Sharon, wasn't it?" Their teacher-role took precedence.

Occasionally their awareness of the camera came to the fore and was easily discernible. They could, of course, not be entirely unaware of the camera in the classroom. However, their commitment was to the children and the curriculum.

> Mrs. Wayne: Once in a long while, I would be conscious of the camera, but usually I am just too busy to notice or to care if you are filming or not. You're doing your thing. I'm doing mine. I think it worked out quite well, don't you?

[It certainly did!]

However, it was also obvious that teachers were concerned about the quality of the video-taping that was possible. If children became too animated for the camera or presented some risk to the equipment, some remark might be made although not necessarily a direct reference to the presence of the camera. E.g., "Concentrate on what you are doing, Danny." If there was any anxiety about the camera's presence, it was more in the line to trying to ensure as normal classroom behavior as possible and honour the purposes of the research. In Goffman's term (1974), the teachers took on the role of "consociates", equally responsible for success.

Shutz (1973), Spradley (1979), and Spindler (1981) write of the need to verify the meaning of any given event with the persons originating the event. Spradley, in particular, has developed a taxonomy of domain analysis which includes three types of questioning, (descriptive, structural, and contrast) and suggests approaches that might be used to verify interpretations given and understood by the ones involved and by the researcher. Used with open-ended flexibility, such procedures yield authenticated interpretations. However, because of the nature of this study with its semiotic perspective and because of serious time constraints, i.e., an extremely busy and involved grade four teacher who had numerous out-of-school commitments, this kind of specific analysis was not undertaken.

Rather, through relatively open-ended interviews and many informal conversations, it was possible to explore and to return to particular points of interest with the teachers. While showing selected scenes from video-tapes of their classroom activities, I chose to have the teachers react to these without specific leads or, if these were necessary, to phrase them in as open-ended a form as possible. "Nelson seems to be interrupting you continually in this scene....?" "What did you mean when you said Get out your folios.'?" "Why did you decide to use the overhead for that particular lesson?" or "What made that lesson so successful?" Their responses were audio-taped and, unless I later had reason to question or pursue the matter further, I accepted these as given.

Occasionally, I offered an interpretation and asked the teachers to verify it. For example, I would refer to details in the video scene that the teacher had not commented upon. The reply might be, "Oh, I didn't even notice that, but yes, now that you mention it, that's right." or "No. I don't think so, because yesterday, when you weren't here, those two boys started a new project..." Transcripts of these discussions provide a valuable extension to the perceptions gained from viewing the video-tapes alone. They highlight the need for a complementary repertoire of data-gathering modes. Each one offers unique and distinctive kinds of information but no one can possibly represent the totality of the experience. Similarly, each perspective--the teacher's, the children's, and the researcher's--adds to the potentiality of understanding and brings it close to fullness.

Calling on another's services, primarily for your own benefit, brings into play the issue of reciprocity. Participation in what the researcher considers to be a significant study may or may not be rewarding in and of itself, especially when the time and effort this requires of teachers and children is considered. A professional trade was made when the video tapes were left with the teachers to view at their leisure. A number commented that they had viewed their own tapes not once but a number of times and derived

> It more or less gives you a good feeling about your teaching. It looks less hectic when you watch it on film than when you are actually doing it...
>
> I just watch what the kids are doing. I think it bothers me more when I'm sitting up there teaching than when I'm watching the video. I can understand, more or less, why they're doing it and it doesn't seem to bother me as much.
>
> Kindergarten teacher

> Well I'll tell you! That was interesting! Just seeing my class and myself on video. I've never seen that before. That was good!
>
> Grade Six teacher

> You know, I never realized how I ignore Jason. See? I walked right by him again. Even though his hand was up. I certainly don't mean to do that. In fact, I make a special point, a kind of a promise to myself, to see each kid as an individual. Boy! That scene alone is worth it.
>
> Grade Two teacher

Challenges During Video-Taping

Having considered what occurred in front of the camera and the reactions of the children and teachers, it is appropriate to consider my role behind the camera and the kinds of decisions I faced. How I use the video camera, what I film, and how I edit, all have a direct bearing of the interpretation that is possible during analysis. In exploring pedagogical meaning in the classroom, the semiotics of the camera becomes as important as the semiotics of the teacher and the children. Understanding the semiotics of film lends considerable insight to making of appropriate decisions during each step of the interpretive process.

Researcher as Cameraman

The decision to manage the camera without the assistance of staff from the Instructional Technology Centre at the University of Alberta was a deliberate one. It made the task much more complex, wearisome, and anxious, since my initial skills were rudimentary at best. However if I handled the camera, it meant one person rather than two or three invading each classroom. This was no small factor in the teachers' decisions to participate or not. It meant too that my decisions concerning the educational significance of an event would be an integral part of the final video tape. The decision "to shoot" or "not to shoot" would rest with me as an experienced teacher rather than with a more technically capable but less educationally-oriented person. I realized too (and it proved itself over and over again) that I had to rely on my professionally-honed intuition to anticipate where relevant incidents would occur. I had to respond to semiotics-in-the-making. If I didn't, they were gone. With one camera, it was impossible to film all the scenes in their entirety, or any single episode from the perspective of the teacher and of the children. But then, neither can observation notes capture the fullness of each interaction.

Filming and the Selection of Shots

Children move. They are in perpetual motion. Poyatos (1982) presents a reappraisal and elaboration of the pioneer work of Efron (1941), and Ekman and Friesen (1969, 1972) in interactive nonverbal communication. His analysis includes among other categories: emblems (vocal and gestural), illustrators, language markers (batons), space markers, time markers, echoics, identifiers, externalizes, regulators, event tracers, object-adaptors and affect-adaptors. Most if not all of these are part of the children's repertoire of communication. At one moment, children are attentive to their own needs; in the next to the teacher; then to their classmates; to the poster on the wall, the person at the door, or the recess bell. In doing this, their bodies move in an intricate harmony with their intentions and their language.

They "check in" with what is occurring in the classroom, connect with the teacher through eye contact, or follow along a line of text as their teacher reads. Perhaps they chase an idea (triggered by someone's casual remark) down their own mental pathways. They are simultaneously in the classroom and beyond it. They may reconnect with a few obligatory phrases or launch into a spontaneous and extended discourse on a topic of particular interest to them. In this multi-dimensional, multi-relational experience (both individual and collective), the "eye of the camera" scans and searches for a moment of significance or, on the instant, must choose between moments of equal significance.

As Heider (1976) points out, the challenge is to catch the beginning of that moment, to anticipate and trigger the lens at the instant of that moment's origin. Paradoxically, we sense a significant moment because we have already responded to ongoing semiotic clues that signal its importance to us. But those cues have already passed, not to be recaptured. So the challenge becomes clear: to anticipate, with all preparedness, before the moment that something will happen. There is rarely a cameraman who does not admit to "luck" and "chance" as critical components in capturing these important "beginnings".

Certainly, familiarity with the situation and with the persons involved is helpful, as is a sensitivity to nonverbal behaviors and the nuances of speech. As I spent more and more time with those involved in the research project, I gradually absorbed the semiotics of their world and eventually developed an engrained alertness to the patterns and changes in their lives. For all of this, and an awareness of the necessity of being watchful for beginnings, many escape. For example, why did the teacher say, "Settle down, Karen." Why did Tracy suddenly hit the boy in front of her? Why did the teacher unexpectedly look up and smile at the Marnie in the front desk? Or why did the small group working on their social studies shout, "Yeah! That's great!", and duck into a huddle again? Even when we bring a knowledge of Peirce's categories of interpretants, (emotional, energetic, and symbolic), we may miss the critical part of their origin--their designatum. We have the author and the sign but little else to give it meaning.

At this point, it is revealing to consider the children's interpretation of the power and limitations of the video camera. We return to the scene where, under my direction, Nancy and Adele were experimenting with the video camera.

> [Why do you want to look through the camera viewfinder?]
>
> Adele: To see what's happening.
>
> [All right. Look through the camera and then look at the monitor. Does it show you the same thing?]
>
> {checks} Yeah, a little bit.
>
> [What do you mean just a little bit?]
>
> Well, it shows me some things.
>
> [Will you explain that to me?]
>
> Like to shows..well, it's hard to explain.

[But I really wish you would try to explain it. What do you mean: It shows some things?]

> Like it shows some things, but it can't show some things. Like the mobile because of the lights. [She had been aiming the camera at the fluorescent light and had created a visual white-out on the monitor.]

[Are there other things that it doesn't show?]

> Well, it doesn't show out there {pointing to the corner of the classroom} or there {pointing to the doorway} outside in the hall.

[But even in here: Do I see everything?]

> No.

[Why not?]

> Because some things are hidden. Like that. {points to math centre to her right}
>
> Nancy: Oh! I know one thing you should film. The waterfall when it's on.

[So there are some things behind the dividers and in the library that I can't see. How about some of the things you are working at that I can't see, even though I do have the camera?]

> Nancy: Well, the stuff in our desks and the stuff in our folders and binders.

[How about the stuff in your head?]

> {Both giggle}

[I can't see that then?]

> Nancy: No!

[How can I get at some of the things in your head?]

> Talk!

[Will that do it?]

> Yeah!

What do you think Adele? Do you agree?]

Yeah.

[Will talking tell me everything you've got in your head?]

Well?...yeah.

[So if I took down your talk, would that be a fair description of what is happening in the class?]

Mmm.

[Is there any other way I can get what is in your head?]

Adele: ...I don't know...

Nancy: I know! We could write things out too.

The girls have said it well: the video camera cannot see everything, not even everything physical. Mental thoughts escape it entirely unless language is used. This delimitation is worth keeping in mind to temper the power and prestige of the camera in human studies research.

Elusive as beginnings are, so are endings. Often, there is a coda to what appeared to have been the end of an event. This is often missed as the camera moves away in its tentative search for beginnings. Equally unresolved is the boundary between one ending and another beginning or between the fine linkage that plays beneath the visible and spoken episode, making it a complex but infinitely more meaningful whole.

Conditioned by the rapidity of commercial televison, the eye behind the camera wants to move on, to find another image, another interaction, another detail, when perhaps greater richness is to gained with a steadily-held camera that waits for an event to evolve, peak, and subside naturally within its own time. Such mastery does not come easily.

Ethical Consideration During Video Taping

The challenge remains continuous: "who" to shoot, "when", "how", and "for how long?" In this, the question of ethics surfaces again: by what criteria does one judge the relevance of a scene? By the need of the researcher? Or by the dignity and rights of the individual being filmed? In discussing the distinction made in journalism, between the public's " right to know" and an individual's right to privacy, Emerson (1970) summarizes:

> The concept of a right to privacy attempts to draw a line between the individual and the collective, between self and society. It seeks to assure the individual a zone in which to be an individual, not a member of the community. In that zone he can think his own thoughts, have his own secrets, live his own life, reveal only what he wants to to the outside world. The right to privacy, in short, establishes an area excluded from the collective life, not governed by the rules of collective living.
>
> (ibid.: cited in Christians, Rotzoll, and Fackler 1983:111)

Considered in its totality, respecting that zone of personal privacy would mean that no research could be done with human beings because, even with their permission, one would inevitably transgress into their lives. However, the differentiation between personal and social privacy is important and it is in looking at the teacher's and children's "social", i.e. pedagogical life, that we gain entry for our research.

One scene during video taping in the classroom raises just this issue. It also has particular semiotic significance for me: I am filming in Mrs. McNamara's kindergarten room, panning the camera around the room with no definite objective other than filming "freetime" when the children choose where in the room they would like to be and what they would like to do. As I turn the camera to a table where a group of children are "just visiting", tiny, golden-haired Stephanie suddenly bursts into sobs. She rubs her eyes with her fists. Tears stream down her cheek and her body is wracked with the emotion. In that moment, I have to decide: Try to capture it or "let it go"? What is more important: the video-taping (my video-taping) or a child's privacy at this poignant moment? Before I can make up my mind (stunned as I am at seeing what I do see through the lens), Mrs. McNamara is kneeling at Stephanie's side, comforting her.

That sign makes it easy for me to decide: I am here (as everyone understands) to film teacher-children relationships. Here is a rare example of emotional intensity and teacher solicitude. It is a significant demonstration of what a good teacher does in handling, as intimately and as privately as possible, an incident such as this in a classroom filled with children. I do not stop the camera. I cannot hear their whispers but I watch through the lens as Mrs. McNamara tucks her arm around Stephanie and pats her gently until her tears gradually subsided. Then Stephanie wipes her tears with her sweater sleeve and nods to Mrs. McNamara who smiles encouragingly at her before turning to other children.

Philip, sitting beside Stephanie, nudges his paper-cup of juice toward her and she sips a little from it. Jennifer, also at the table, leans over and whispers to Stephanie who nods an answer. And I? I have an uneasy feeling that I am intruding into something too personal to be filmed. It is easily justified academically, but is it justifiable in terms of human compassion?

I was not sure that I would "use" the scene. But obviously I have. Not for an analysis of pedagogical relationships and the semiotics which make that possible (although these implications speak for themselves) but here, as an example of the kind of decisions that emerge from the act of doing observations with human beings. However, it is important to know that I have used the example only because of another specific sign: when I looked over the camera at Stephanie, she looked up at me and gave me a smile that seemed to say, "It's okay. I don't mind...I'm all right now." In that look, she implicitly gave me permission to use the segment and talk about the drama that she had just lived through. It could been otherwise. But Stephanie also made me think about child's rights in this business of observing human experience and realize, very clearly, that it is a delicate matter to get your information and respect those who give it to you.

> It is at least sometimes morally obligatory to consider the interests, wishes and point of view of young children with the same degree of seriousness as those of adults who are in a position to assert their rights more effectively and forcefully. . .
>
> That children have rights is not to be seen as a matter of purely academic interest.
>
> (Wringe 1981:162 cited in Wolffe 1983:54)

The Technicality of Time and Place

Two other factors influence the filming that can be done in the classroom. One is audio variability and the other is time constraints. What people say becomes the framework within which meaning is interpreted. It may be modified or even negated by simultaneous nonverbal hehaviors. But these behaviors do not allow us easy access to what something means. Although we incorporate nonverbal behaviors to a surprising degree while gathering meaning, we do this so implicitly that it is only with astute concentration that the separation can be made in ordinary verbal interactions. But, occasionally, this is all that is available on the video tape.

Obtaining audio pickup in a classroom setting is difficult, especially while attempting to keep the situation as natural as possible. While it may be feasible to equip a teacher with a lapel microphone, it is not convenient or practical over a long period of time. I began my observation and video-taping with a supplementary microphone at the front of the classroom and repositioned it to wherever major pedagogical experiences were presented. It soon proved too cumbersome. But even more importantly, it interfered with the space in which the teacher and children were accustomed to moving. What was gained to audio acuity was lost in the distortion of normal mobility and naturalness.

However, camera-attached microphones record all sounds equally, the wild sound of the natural environment as well as situational discourse. It records sound most effectively within the area around the camera. This is not necessarily where the "action" is.

As a result, the audio-gaps occurring in the video-taping of large groups may affect the accuracy of subsequent interpretation. Private talk, such as that which frequently occurs between teacher and child during an instructional context, is particularly difficult to obtain. Yet it may be extremely valuable. It may provide important insights into how teachers give individualized instruction in a total class setting. I filmed a lengthy scene of a grade five teacher helping a girl develop a final copy of her creative story. They were beyond microphone coverage and I could interpret only very broadly the tenor of their discussion from their nonverbal behavior. In such circumstances, I might consider the artificiality of a trailing lapel-microphone in exchange for the specific evolution of teacher-child interaction and the meaning that was nurtured between them.

Similarly, child-to-child discussions can be extremely useful in providing us with glimpses of their perceived world. An around-the-table discussion by a group of Kindergarten children, on why girls are better than boys, is an example of the spontaneous conversation of children that tells us much more than their formalized classroom responses ever could.

One last point: every classroom has a clock and virtually every teacher filmed, at one time or another, glanced at the clock and used that information (semiotic) to continue, modify, or terminate an activity. Arbitrary school opening and recess and dismissal times are complemented by cues for period changes, resource room time, teacher exchange, or location changes. These time-boundaries also abruptly and irretrievably "cut" the scenes being filmed. Ironically, it is quite possible to "capture" a beginning that doesn't have a chance to complete itself. Again it becomes obvious that the continuum of human interaction does not stop at the sound of a bell and that moments of significant exchanges may walk out the door and out of the camera's view.

Adjunct to the time boundaries within the setting are the time constraints imposed by the researcher's time-agreement with the teacher, by the availability of equipment, by the cost of film, and by the practical reasonableness of editing and analyzing quantities of film. Ultimately the reality captured on film becomes a measure of the filming time within which experience is wrapped. The challenge is to make what time is available and subsequently represented on film as relevant as possible. It can never be complete.

The Challenge of Video Analysis

Once video-taping has been completed and the researcher leaves the scene, the process of determining the significance of the filmed data begins. Several viewings are necessary for the researcher to become familiar with the general import of the sequences. It then becomes necessary to select from the total context that which is pertinent to the study under consideration. This phase of my analysis involved screening the videos, coding the major highlights for easy referral, noting in a logbook the main emphasis of sequences, and cueing dialogue where it was semiotically relevant. Comments were also added about the significance of each scene to the theme of semiotics, e.g., the use of iconic posters or models of the St. Lawrence lock-system, indexical charts such as bar graphs or spelling charts, or sign systems such as the alphabet band across the top of the blackboard, the timetable, and formats used in different subject areas. Identifying these main categories provided an expedient way to "pull" related scenes for more extensive analysis.

Further differentiation of scene content was made in terms of explicit or implicit messages conveyed by the teacher and the children. This rough division led to later analysis of the underlying symbolic meaning of specific behaviors and communicative content beyond the apparent instructional intent. Analysis geared to specifically foreshadowed questions, i.e., semiotics, unmasked the dynamics of ongoing classroom activities. Whatever the focus of the analysis, that perspective deliberately yet flexibly taken brings a new focus to undifferentiated events. Whereas participant-observation or observation alone might have identified the semiotics of the pedagogical process, it is extremely doubtful whether nuances could have been detected other than on video and with the stop-action of the editing equipment. It is this distinction-of-action which video-recording can preserve, and which makes possible more precise and meaningful analysis. Our understanding of the intricacies of the pedagogical process is proportionately enriched.

Because the data is captured permanently on video, it is possible to extend the lines of inquiry and create an ever-expanding breadth of meaning. At any one point, the challenge is to keep a clarity of outlook and to avoid blurring interpretations. While there is a dialectical relationship between the semiotics of the classroom, the personal beliefs of the teacher, and the home environment of the children, any one research undertaking cannot to make a thorough investigation of all interwoving issues. Necessity provokes selection.

This is not to say that data should be ignored if it does not speak to the researcher from the outset. A simple but potent example brings this realization to the fore. In interviewing Mark, a kindergarten boy, about where he looked when the teacher was speaking to the class, he replied, "I look at her chin." This answer puzzled me for a considerable period of time. Suddenly I understood, but only because I had

I replaced my interpretation filter with one similar to what Mark's might be. I literally re-places Mark's comment in his classroom context. Mark sits in the first seat of the middle row, just below the position his teacher commonly assumes when giving instructions to the class. As he looks up at her...of course...he sees her chin! He cannot easily see her lips or her eyes except from a distorted perspective.

This realization dramatically calls into question the validity of my having filmed the activities of his classroom and others from my eye-level, from the camera on the tripod towering over the children. Mark's world is quite different in this simple but obvious and overlooked way. What might the camera see if it filmed events from the child's physical point-of-view, and what different interpretations might we not draw from such visual data?

Such is the value of "the nagging question" and the uneasy feeling that will not be laid to rest. Its value is that it tells us that there is more, if we but have the persistence to explore it. Such unresolved issues may well become the richest lode of all.

Several other issues are involved in decisions associated with the selection of specific sequences as exemplars of pedagogical meaning. Authenticity of interpretation is one of these issues. The totality of context must be measured on the basis of each experience that confirms or rejects this particular interpretation of this particular behavioral episode. The interpretation represents, if not the possibility of precise duplication in other circumstances, at least a commonality with human experience that can be recognized by those significantly involved in similar activities.

Here, experiential authenticity is reinforced by teachers' and children's verbal and nonverbal leads. Or if presented with alternative interpretations, they may accept certain thematic patterns above others proposed by the researcher. These, in Shutzian "commonsense reality", cannot be defined in quantitative terms but are confirmed by the repertoire of human experiences shared by those participating in the event. Here, too, the criteria of clustering supportive interpretations is particularly important.

Similarly, accuracy of analysis is measured by the degree of consensuality it can motivate in informed others. Crucial to this confirmation is an implicit trust in the integrity of the researcher as this is exhibited by the research design, by his or her public and professional relationships with all those involved, by the degree to which arguments for a particular interpretation are substantiated, by the credibility of the illustrations used, and by the general tenor of believability that pervades the entire research documentation. While these characteristics are not measurable qualities, their absence should give rise to serious queries concerning the status and recognition that might be accorded the research findings.

While commonality and consensuality of interpretation are fundamental criteria, one other area in particular bears explication: the unexpected, esoteric, or contradictory moment or event. Its very uniqueness may make it suspect. It may be commonly regarded as an exception, out of context and therefore not to be accounted for. Yet, just as Mark's remark about his teacher's chin (by its very peculiarity) leads to an important and neglected issue in the gathering of experiential information, the "strange" event may be more telling than the commonplace.

Analyzing a wealth of material can be intimidating. Inevitably, there is a certain slippage in focus and emphasis as the analysis continues. Unless research is undertaken as a long-term and self-pacing undertaking, certain hard decisions must be made. Heider (1976:137-157), in formulating his Atttribute Dimension Grid for the analysis of ethnographic film, does not provide answers that can be applied directly to interpretive analysis. However, the questions he raises are valuable in centring the researcher's intentions during the analytical process. The following questions have been extrapolated from Heider's Grid as a synthesis particularly relevant to analyzing classroom video-tapes.

> How is one to determine what is most relevant in the vastness of information gathered?
>
> How does one select exemplars from the many possibilities offered?
>
> Is the aesthetic of narrative clarity in documentation more important than a thematic development of the information?
>
> Should narrative be added to the captured events and discernible moments or should these scenes be allowed to speak for themselves? How much should the teachers' and children's voices from observations and interviews be used--especially in proportion to the researcher's reflection on those comments?
>
> How can the researcher's intuitive impressions be authenticated?
>
> Should the natural "real" sequence of events be maintained or is juxtaposing scenes out of their natural sequence more effective?
>
> What criteria should govern "reconstructed" scenes? How is a balance between natural even-pacing and clustered-detail sequences to be developed?
>
> How can meaningful montages be created from many illustrative scenes to portray a thematic pattern?
>
> What should be done with revealing but nonthematic episodes?
>
> How is content integrity to be ensured over theoretical versatility?

These and many related issues must be resolved if the integrity of the persons and their lived experiences is to be honoured in research documentation. These decisions begin with the first formulation of background ideas for the study and continue throughout to its completion. While the actualdecisions at each point in the analysis may be similar to those made by other researchers interested in human studies, their resolution and final interpretation will always bear the "mark" or "sign" of each individual researcher.

The challenge of analysis remains a constant. Every decision is related to a value judgement and to a myriad of criteria interwoven in the personal and professional makeup of the researcher. The attraction and versatility of the visual medium may obscure the need for complementary supportive data. However, any interpretation grows more "real" from a continual shuttling from video tapes to observation notes, and from interviews with teachers and children to reflective analysis by the researcher. This encompassing circularity clarifies, extends, and consolidates a richer and more sensitive understanding of the situation and its implications.

Because of the selective nature (though valuable specificity) of evidence attainable through video-tape recordings, the medium has tremendous potential value in human studies research in general and in educational research in particular. Its ever-increasing use provides us with new and clearer insights into child development, teacher performance, human interrelationships, concepts of power and control, and the transmission of cultural values and expectations. Not in the least, it allows us to spotlight the semiotic undercurrents that are conveyed through our educational institutions. To restate Carey's belief (1983): the potential of a semiotic approach to the study of education has yet to be realized. When the balance of time invested and the frustration and endurance required to conduct human studies is measured against the joy of discovery, it remains infinitely rewarding to nudge our understanding of that frontier.

The Semiotic Significance of the Study as The Dialectic of Pedagogical Content and Research Design

This study is, I believe, one of the first of its kind in its approach: the conspicuous use research techniques to describe from a semiotic point of view the semiotics of the elementary classroom. It is concerned with the natural and continuous dialectical and pedagogical relationship within which teachers and children, through the use of explicitly and implicitly perceived sign systems, create meaning. From conceptualization to completion, the process of this research undertaking has been anchored in a sensitivity of how the instruments of research (in this case, the audio and video-tape recorders in particular) tell a particular kind of story about human experience. That story is implicitly shaped by the sign systems that are inherent to the instrument, for example, the camera lens. Throughout this study, I have diligently tried to differentiate between the semiotics of the observation instrument and the semiotics of the persons involved in pedagogical relationships. Not unexpectedly, this has not always been possible.

In doing this study--in building a collection of pertinent pedagogical experiences--I did not do anything particularly different from what other researchers have done and will continue to do. However, I feel there has been a more articulated and self-conscious use of research techniques as co-partners, "consociates" if you will, in the creation of meaning from which analysis and interpretation arose. A simple example may suffice: nonverbal semiotics have played a critically important part in the final synthesis of meaning, whether, for example, this meaning has evolved from the briefest eye contact or touch exchange between teacher and child or whether it was meaning derived from the way in which teacher and children used space (without articulating its use) in the flux of continuing activity. This non-discursive "ingredient" of interpretation was accessible to me largely because of the use of the video camera. While personal observation can be accurate and astute, it rarely can be as continually perceptive as the video camera. Nor can it "pick up" the fleeting nuances of expression and attitude as surely.

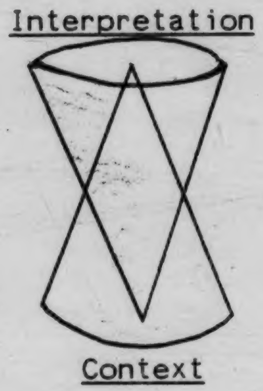
In this semiotic sensitivity to the use and effect of research instruments in documenting human experience, the subject matter of my study--the semiotics of pedagogy--emerged as a field rich in meaning, complex in its creation, powerful in its effect, and critical to our understanding the life of teachers and children in the classroom. My documentation of the semiotics of pedagogy focuses on a fundamental premise: the "real" world of teachers and children. All significant interpretations have originatedfrom those life-experiences, from the signs used, implied, and understood in that interacting communicative life.

In contrast, it would have been possible for an experienced educator to have reflected on pedagogical episodes by using any number of sources (personal past experience, anecdotes of others, literary references to education, supposition, or reference to experimental findings). A commentary text might have been formulated as an exclusively interpretative, retrospective, speculative, or theoretical dissertation. This too would be a valuable contribution to pedagogical wisdom, but I have chosen to stay with and as close as possible to the voices and actions of teachers and children and to read their signs as carefully and as completely as possible before considering a reflexive interpretation.

Figure 10, based on Bunn's diagram of two interpenetrating cones suggesting the meeting of two kinds of discovery (1981:155), has been used here to show the merging of the semiotics of research with the semiotics of pedagogy As Bunn describes in his analogy of Watson and Crick's DNA discovery (1953) and the value of models in scientific discovery, within these cones is an implicit double-helix of movement and change.

Figure 10 The Semiotic Compatibility of Research and Pedagogy as Semiotic Processes

Pedagogy as a Semiotic Process



Research as a Semiotic Process

As I learned more about semiotics and more about discerning meaning in action, I too experienced the mutually-perpetuating interaction between how I functioned as a researcher and how those whose lives provided the material for interpretation created meaning.

In "reading" the interpenetrating cones, the base of the research cone represents that totality of the context of human experience that presents to the researcher the field of study: the pedagogical meaning of persons, setting, situation, actions, artifacts, language and contingencies. The opposing cone represents the degree of understanding the researcher can derive from the context presented to him. Initially, the context of the pedagogical scene envelops him, but he can understand little in proportion to its totality. The complexity of meaning which the context carries is not revealed until through time and experience the researcher can begin to select significant features and understandings from the context. This he does in a close relationship with those _in_ the context.

At the apex of the research cone, the researcher's acuity can select more rapidly and with greater certainty the contributory aspects that illuminate a specific field, point-of-interest, or signification. This perceptiveness has been shaped by the context into which the researcher has become absorbed. This process is of course repeated innumerable times as the researcher focuses on independent features or on relevant clusters of dialogue, action, or events. The researcher gradually moves from a blurred totality of ambiguous meaning to an empathic understanding and an appreciation of specific and often unique meanings.

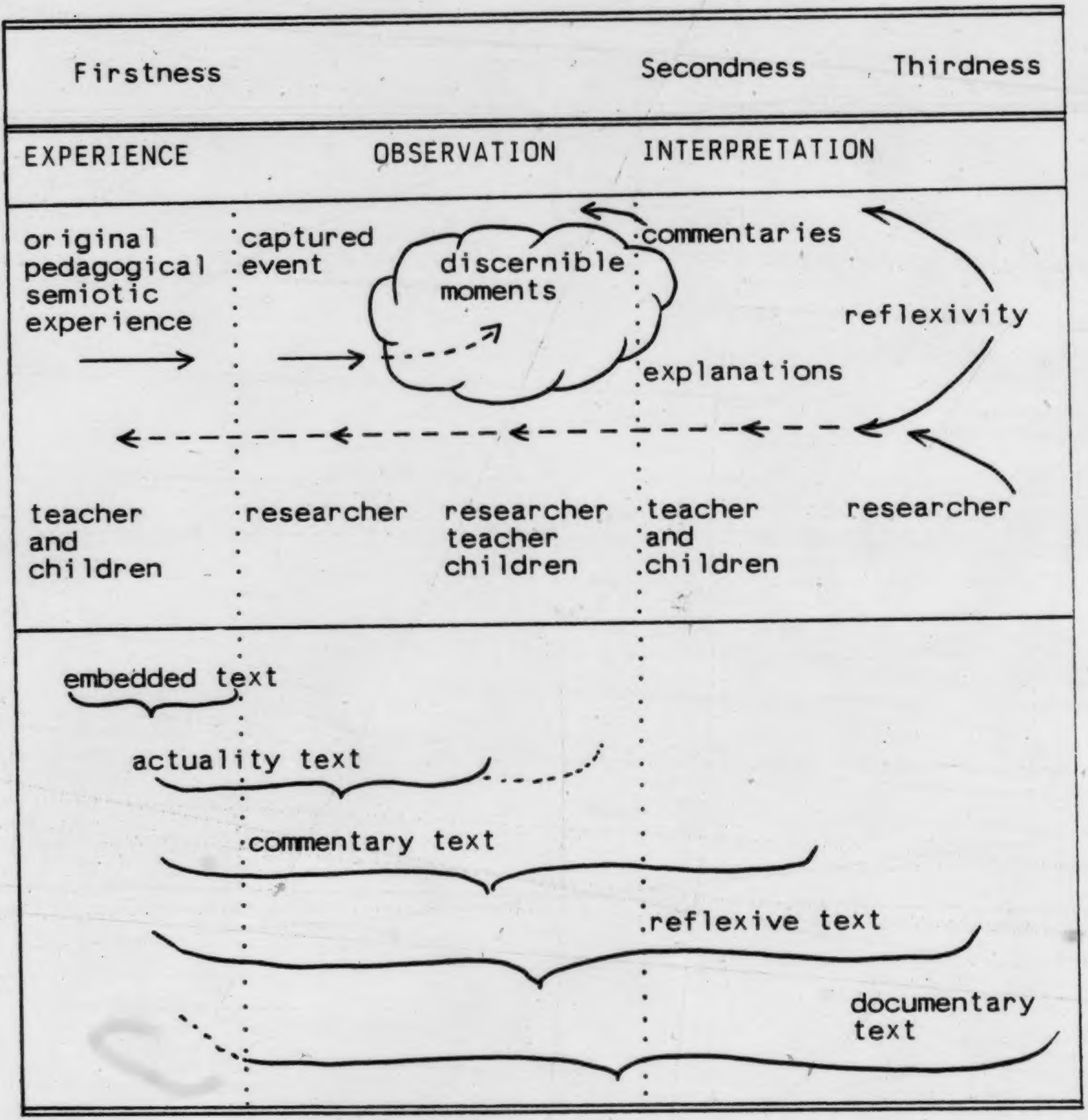
Conversely, "reading" the research cone from its apex to its broadening area, one might infer that a researcher's degree of awareness and ability to interpret within a new context is relatively small compared to the massiveness of the context (as potential interpretation) which envelops those directly involved in its creation and its continuance. As time, experience, and the exercise of critical awareness increases, the researcher is able to discern with sensitivity and acuity deeper and broader inferences from relatively small fragments of meaning created in that context.

This double helix of interpenetrating interpretation in a pedagogical context suggests that researchers cannot too quickly presume to fully understand the context in which they find themselves. Interpretation may be a final product of their activities but it is derived from the temporal and spatial process which is determined by the receptiveness and openness of the subjects as much as by the researcher's intentions. Ultimately, the authenticity of meaning is derived from the ongoing movements of both spirals--of context and of interpretation--in reciprocal development and change.

As Table 6 summarizes, I interpret the research process as primarily based on the "reading" and sharing of semiotics. There are two concepts that have had a critical impact on how my research was conducted in elementary classrooms.

First, the concept of "discernible moments" as triggered by inherent semiotics--symbolic cues--has been a way of recognizing meaning and interpreting it directly from life experience. While the discernment is external to the experience, it is not random nor unrelated to it. It is a spontaneous and meaningful response to language, behavior, and attitudes that have been given by one person to another.

Table 6 Research as a Semiotic Process: Experience and Text


Firstness
Secondness
Thirdness
EXPERIENCE
OBSERVATION
INTERPRETATION
original pedagogical semiotic experience
captured event
discernible moments
commentaries
explanations
reflexivity
teacher and children
researcher
researcher teacher children
teacher and children
researcher
embedded text
actuality text
commentary text
reflexive text
documentary text

It can be argued that all research in human studies is similarly based. The value that this study lends to an exploration of meaning is that the source of interpretation is explicated. By pointing to the semiotics created within the experience, I have in turn given these signs to the reader. By demonstrating where I found meaning, I have attempted to point to those signs in life experience that are already there but that are so embedded in a sweep of language, action, and concerns that their distinctiveness and importance may be blurred. Often these signs have been covered with assumptions, conventions, presuppositions, habit, indifference, or such familiarity that they escape our notice. Quite simply, I have attempted to show what it is that makes us stop and notice--the word, gesture, act or total "sense" within an experience, or an inner harmony (like a familiar but unnameable melody) that links one event or one brief moment to another.

In these moments are signs as obvious as whistles, as subtle as the scent of crocuses, or as evasive as a fragment of memory in search of its own meaning. The discernible moment has no grandeur of methodological importance. All researchers build their interpretation on such moments of understanding. To know why one does this and what in the context gave that glimpse of meaning is to find one's way to a deeper understanding. The discernible moment signs to us as a person who is deaf might--beckoning--drawing attention to itself, for it has much more to tell.

But as Esslin (1984) points out, the sign (the discernible moment) must first draw our attention to itself before it can give meaning to us. We must be aware that meaning is to be given. Recognizing the discernible moment is to take notice, to anticipate, and to be responsive to the coming of meaning. We must allow meaning to enter into our understanding. For is not "lack of understanding" or "misunderstanding" an act of not recognizing meaning where meaning exists or of refusing meaning when it is offered? The concept of the discernible moment reminds us that the world hums with meaning, is meaning. We have but to welcome it.

The second contribution that this study makes is that of "experiential texts" which direct our attention, not to the moment of meaning-creation (as the discernible moment does), but to the process of reflecting on that experience. It is a process of building-meaning-on-meaning. It is Langer's (1982,1942) intellection or Nadin's (1983) expression of ideas. It reflects Ricoeur's belief that the meaning of an event is its forthcoming interpretation (1978:281). Experiential texts are the traces that we put before ourselves to understand ourselves better, to understand others better. They are the externalization of our being in life, the mirror in which we see our own "dance of being" (Feldstein 1979). They are our telling to ourselves of what and who we are. As one person shares his or her text with another, two understand...then four, then many more.

What we say--our "said"--is our meaning. The source and circumstance of that meaning creates a luminosity around that meaning, around the inseparability of the creator of sign, designatum, sign, and interpretant. The particulars of its source--as intention, circumstance, and context--are vital in shaping meaning, in gaining, and giving interpretation. They imply more than a facile exchange of a code called language, more than a posturing of the body. Experiential texts evolve as multi-layered ideas, reaching from our essential being to an expression of our thoughts. Again, these texts are semiotic-- sign-saturated--waiting to be interpreted, waiting to be assigned meaning in another form. This form is semiotic, the reflection of an unending search to find the sign that stands to something for someone else. Experiential texts define that search as it moves from the instance of meaning-creation to it's explanation and then on to deeper interpretations. They stand as landmarks to meaning.

It may be that the very simplicity of "discernible moments" and "experiential text" may hold a key to our greater astuteness in interpreting human experience and, as in the context of this study, lead ultimately to a greater understanding of the pedagogical process. This dissertation has been an explicit demonstration of how these concepts can be used to explore the semiotics of elementary classrooms but they also have relevance to other areas in human studies research.

It is obvious that semiotics and the levels of meaning that signs create play a crucial role in the dialectical dialogues that constitute pedagogical meaning between teachers and children. Indeed, pedagogical goals are intimately interconnected with children's mastery of sign systems and their functions, a mastery commonly regarded as "literacy". Peirce's theory of signs suggests nuances commonly though implicitly assumed to underlie the process of "becoming educated", of understanding and using symbolic forms to communicate with others. And to understand, use, and share the semiotics of human interrelationships is fundamental to our way of being alive, is our way of being.

This semiotic exploration of the semiotics of the classroom has focused on three main themes that have emerged from the life experiences of the teachers and children. First: the semiotics of the space of the classroom as interpreted from observations of how teacher and children use that space. It has been shown that space is not just an implicit atmosphere in which people work and learn but rather a profoundly symbolic place in which they live. That space represents their place in the world as individuals and as members of a special group of people. It speaks of their relationship to learning, to others, and to themselves. It is a space that contains and a space that frees. It "holds" both teacher and child but in its potentiality gives them a place from which they may move. In its implicit aura of belongingness, it gives them the surety to explore beyond that physical space. It gives them "something to hold onto" as they reach from what is known and familiar toward what is yet to be discovered. From this space, they can explore further and yet further.

The second theme that emerged was that of the semiotics of interpersonal relationships, of how teacher and children "know" who they are, and what gives them a particular identity as individuals and as persons involved in the pedagogical process together. The meaning of these relationships was interpreted exclusively from the signs that they "read" in each other's appearance, behavior, and language.

There are two "images" that teacher and children carry of each other. One is the image of constancy and predictability: how each individual acts most of the time and how he can be expected to respond to given situations and circumstances. Over time, this image (the perception of the individual) has been built on the signs of that individual, on the signs about him as given by others, and on the interpretation of these signs by the ones who hold that image. The signs of his language, posture, expression, mood, behavior, and attitude form this composite. They are implicitly understood as "given", as letters of the alphabet are given. But just as these letters are only constant in their traditional sequence as the alphabet, so it is that the individual "image" is only constant as a background against which his flux of life is enacted.

The second image that marks the semiotic relationships of one individual with another is a more elusive one: the person as a living being responding to constantly shifting intentions, interests, concentrations, expectations, and ideals as these are created by that person or by those who are significant in his or her life. Here, semiotic-surprises heighten others' sensitivity and responsiveness: Who is this person I thought I knew? What does this sign tell me about this person? Where do I fit this new impression into the meaning I already hold? It is this changing and growing aura of meaning that intrigues me, this implicit meaning that takes our relationship one step further.

In the pedagogical situation, these semiotic relationships seem to sustain the way in which teacher and children accept each other as "given". Yet, at the same time, these same relationships create an open-endedness that keeps their togetherness viable and valued. Many examples have been given of how the semiotics of the person influence the semiotics and possibility of compatibility within a one-to-one relationship or within the group. The semiotics of pedagogy appear to be derived directly from the semiotics of the relationships that is established between the teacher and those who are learners.

The third theme of this dissertation--the semiotics of pedagogy--speaks of the way in which teachers create meaningful experiences for the children. It involves the creation and perpetuation of interest, a willingness to participate in the evolution of knowledge, and a way of overcoming confusion and circumventing difficulties in learning. The semiotics of pedagogy is also an integral composite of the effects of relationships between teacher and children, the language they use to one another, and how that language is used and responded to. There are many critical semiotic conditions that influence and often conclusively determine how effective the pedagogical relationship will or can be. These include how and when instruction is presented, the inclusion or exclusion of different persons in the learning process, the resources used by the teacher, and the activities created to involve the children in the process of inquiry and knowledge discovery.

The concept of semiotics of the classroom is not new. Theories and practices concerning educational philosophy, instructional methodology, the learning process, group dynamics, personal development, creativity, problem-solving skills, specialized interests, career opportunities, and life-long education are all based on the articulation of the sign systems people use to communicate and to live with one another. What is new and what this study offers to educational research is a way (so inherently a part of the pedagogical process) in which we can get beneath the glaze of activity that we call teaching and learning and explore the reasons for our successes and failures. Semiotics of the classroom allow us to return to the very clay from which that success or failure is created. The reason may be as simple as recognizing the powerful effect of the semiotics-of-delay as described in this study or as complex as the challenge of instilling an attitude toward learning as a rewarding life-long activity. It can be as obvious as giving eye contact to an individual as a sign to him of his rightful belongingness in the group, or as difficult as leading someone into an understanding of limitation and the potentiality of historical investigation. Identifying the semiotics at play becomes the critical beginning. Recognizing their power is next. Turning that power to work for education is the ultimate triumph.

In leaving behind the traces of my semiotic exploration of the semiotics of the classroom, I leave this dissertation as an imprint or a marker indicating my passage through the research process. But I leave it, too, to be accepted as a sign of past pedagogical experiences (mine, the teachers', and the children's)--as a sign that traced, drew a line around events and people to show more clearly what it is they mean and how they create that meaning. I have attempted to show the origins of that meaning, to trace it back to its source--to the words and actions of those who are pedagogically related. To "trace" is to discover by examination or investigation, to determine. To say "This is what I see. Take these traces and make your way through them to your own understanding." Trace...from Old French trahere to draw. I can only invite you to draw your own conclusions from the signs I have given.

It is entirely appropriate that education and educational research as the fulcrum between home and society should assume their roles in furthering semiotics both as a field of study and as a perspective from which to view the emergence of meaning in individuals and in the broad context of society. The exploration of the semiotics of the classroom will not end with this documentary text. It will be continued by the efforts of all those who recognize and celebrate the critical importance of pedagogy.

In its own semiotic way, this dissertation suggests a beginning.

> Human deeds are...waiting for fresh
> interpretations which decide their meaning.
>
> (Ricoeur 1978:28)

BIBLIOGRAPHY

Often books speak to other books...it is as if they spoke among themselves...an imperceptible dialogue between one parchment and another, a living thing, a receptacle of powers not to be ruled by the human mind, a treasure of secrets emanated by many minds.

(Eco 1983:286)

Achen, Sven Tito Symbols Around Us, New York: Van Rostrand Reinhold Co., 1978.

Akmakjian, Hiag Snow Falling From a Bamboo Leaf: The Art of Haiku. Santa Barbara, Calif.: Capra Press, 1979.

Almeder, Robert The Philosophy of Charles S. Peirce: A Critical Introduction. Oxford: Basil Blackwell, 1980.

Antaki, C. (Ed.) The Psychology of Ordinary Explanations of Social Behavior, London: Academic Press, 1981.

Argyle, Michael Nonverbal Communication in Human Social Interaction. In Nonverbal Communication edited by R.A.Hinde. Cambridge: Cambridge University Press, 1972, pp. 243-268.

Alberta Education School Libraries: Policy, Guidelines, Procedures and Standards. Edmonton, Alberta. October 1984.

Baer, Eugen Medical Semiotics: A New Paradigm. Semiotica 37 1/2 1981, pp. 165-191.

___________ A Semiotic History of Symptomatology. In History of Semiotics, edited by Achim Eschbach and Jurge Trabant. Amsterdam: John Benjamins Publishing Company, 1983, pp.41-66.

Bain, Bruce (Ed.) The Sociogenesis of Language and Human Conduct. New York: Plenum Press, 1983.

Barrett, William The Illusion of Technique: A Search For Meaning in a Technological Civilization. New York: Anchor Books, 1979.

Barthes, Roland Elements of Semiology, London: Cape, 1967.

___________ S/Z, An Essay. Translated by Richard Miller. (Original in French, 1970). New York: Hill and Wang, 1974.

___________ New Critical Essays. Translated by Richard Howard. New York: Hill and Wang, 1980. Original French edition 1972.

___________ Camera Lucida. New York: Hill and Wang, 1981.

Battersby, David The Use of Ethnography and Grounded Theory In Educational Research. *McGill Journal of Education*, Vol. XVI, No. 1, Winter 1981, pp.91-98.

Bauman, Richard Conceptions of Folklore in the Development of Literary Semiotics. *Semiotica*, 39-1/4, 1982, pp.1-20.

Beane, Wendell C. and Doty, William G. (Eds.) *Myth, Rites and Symbols: A Mircea Eliade Reader*, Volume 2, New York: Harper Colophon Books, 1975.

Berger, Peter and Kellner, Hansfried *Sociology Reinterpreted: An Essay on Method and Vocation*. Garden City: Anchor Press, 1981.

Bleich, David *Subjective Criticism*. Baltimore: The Johns Hopkins University Press, 1978.

Bogdan, Robert and Taylor, Steven J. *Introduction to Qualitative Research Methods*. New York: John Wiley and Sons, 1975.

———————————— *Inside Out: The Social Meaning of Mental Retardation*. Toronto: University of Toronto Press, 1982.

Brause, Rita S. and Mayher, John S. Teacher, Students and Classroom Organizations. *Research in the Teaching of English*. Vol. 16, No.2, May 1982, pp.131-148.

Bredo, Eric and Feinberg, Walter *Knowledge and Values in Social and Educational Research*. Philadelphia: Temple University Press, 1982.

———————————— The Critical Approach to Social and Educational Research. (1971) In *Knowledge and Values in Social and Educational Research* edited by Eric Bredo and Walter Feinberg. Philadelphia: Temple University Press, 1982, pp. 271-291.

Briggs, Charles Questions for the Ethnographer: A Critical Examination of the Role of the Interview in Fieldwork. *Semiotica*, 46-2/4 (1983), pp. 233-261.

Bunn, James H. *The Dimensionality fo Signs, Tools, and Models*. Bloomington: Indiana University Press, 1981.

Canter, D. and Brown J. Explanatory Roles. In *The Psychology of Ordinary Explanations of Social Behavior* edited by C. Antaki. London: Academic Press, 1981, pp. 221-242.

Deely, John Introducing Semiotics: Its History and Doctrine. Bloomington: Indiana University Press, 1982.

Deely, John N. and Lenhart, Margot D. (Eds.) Semiotics 1981. New York: Plenum Press, 1983.

DeGeorge, Richard T. Semiotic Themes. Lawrence: University of Kansas Publications, 1981.

Carey, Robert Semiotics and Education (Course Outline) Calendar for the Fourth International Summer Institute for Semiotic and Structural Studies. May 30-June 24, 1983. Bloomington: Indiana University. p.13.

Cassirer, Ernst The Philosophy of Symbolic Forms: Volume 3 The Phenomenology of Knowledge. Translated by Ralph Manheim. New Haven: Yale University Press, 1957.

Christians, Clifford G., Rotzoll, Kim B., and Fackler Mark Media Ethics: Cases and Moral Reasoning. New York: Longman Inc., 1983.

Clark, Richard E. Reconsidering Research on Learning from Media. Review of Educational Research. Winter, 1983. Vol. 53, No. 4, pp. 445-459.

Coenen, Herman Improvised Contexts: Movement and Perception in Deaf Children's Interactions. Paper presented at the 10th World Congress of Sociology, Mexico City. August 1982.

Cortis, Gerald The Social Context of Teaching. London: Open Books Publishing Ltd., 1977.

Crick, Malcolm Anthropological Field Research, Meaning Creation and Knowledge Construction. In Semantic Anthropology edited by D. Parkin. London: Academic Press, 1982, pp. 15-38.

Csikszentimihalyi, Mihalyi and Rochberg-Halton, Eugene The Meaning of Things: Domestic Symbols and the Self. Cambridge: Cambridge University Press, 1981.

d'Aquili, Eugene G., Laughlin, Charles D., and McManus, John (Eds.) The Spectrum of Ritual: A Biogenetic Structural Analysis. New York: Columbia University Press, 1979.

Danow, David K. Bakhtin's Concept of the Word. American Journal of Semiotics. Vol. 3, No.1.,1984, pp. 79-98.

Darroch, Vivian and Silvers, Ronald J. (Eds.) Interpretive Human Studies: An Introduction to Phenomenological Research. Washington: University Press of America. Inc., 1982.

De Bono, Edward Lateral Thinking: A Textbook of Creativity New York: Harper & Row, 1970.

Dillon, David and Searle, Dennis The Role of Language in One First Grade Classroom. Research in the Teaching of English. December 1981, pp. 311-328.

Druckman, Daniel, Rozelle, Richard M. and Baxter, James C. Nonverbal Communication: Survey, Theory, and Research. Beverly Hills: Sage Publications, Volume 139, 1982.

Dummett, Michael Language and Truth. In Approaches to Language edited by R. Harris. Oxford: Pergamon Press, 1983, pp. 95-125.

Ebbesen, Sten The Odyssey of Semantics from the Stoa to Buridan. In History of Semiotics edited by Achim Eschbach and Jurgen Trabant. Amsterdam: John Benjamins Publishing Company, 1983, pp. 67-86.

Eco, Umberto A Theory of Semiotics. Bloomington: Indiana University Press, 1976.

____________ The Role of the Reader: Explorations in the Semiotics of Texts. Bloomington: Indiana Univeristy Press, 1982.

____________ The Name of the Rose. San Diego: Harcourt, Brace, Jovanovich, Publishers 1983. (Original Italian 1980).

____________ Semiotics and the Philosophy of Language. Bloomington: Indiana University Press, 1984.

____________ and Sebeok, Thomas A. (Eds.) The Sign of Three: Dupin, Holmes, Peirce. Bloomington: Indiana University Press, 1983.

Eckman, Paul and Friesen, Wallace V. The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding. In Nonverbal Communication, Interaction, and Gesture edited by Adam Kendon. The Hague: Mouton Publishers, 1981, pp. 57-106.

Edelsky, Carole, Draper, Kelly, and Smith Karen Hookin" Em In at the Start of School in a Whole Language' Classroom. Anthropology and Education Quarterly, Vol. 14, 1983, pp. 257-281.

Eisenstein, Sergei The Film Sense. (Original in Russian, 1942). Translated and edited by Jay Leyda. New York: A Harvest HBJ Book, Harcourt, Brace, Jovanovich, 1975.

Erickson, Frederick What Makes School Ethnography Ethnographic? Anthropology and Education Quarterly, Vol. 15, 1984, pp. 51-66.

Eschbach, Achim Prolegomena of a Possible Historiography of Semiotics: The Development of a Semiotical Fact. In History of Semiotics edited by Achim Eschbach and Jurgen Trabant. Amsterdam: John Benjamins Publishing Company, 1983, pp. 25-40.

Eschbach, Achim and Trabant, Jurgen . History of Semiotics. Amsterdam: John Benjamins Publishing Company, 1983.

Fabian, Johannes Time and the Other: How Anthropology Makes Its Object. New York: Columbia University Press, 1983.

Fawcett, Robin P., Halliday, Michael A. K., Lamb, Sydney M., and Makkai, Adam The Semiotics of Culture and Language.
Volume 1: Language as Social Semiotic.
Volume 2: Language and Other Semiotic Systems of Culture. London: Frances Pinter Publishers, 1984.

Feldstein, Leonard Charles The Dance of Being: Man's Labyrinthine. New York: Fordham University Press, 1979.

Firth, Raymond Symbols: Public and Private. Ithaca: Cornell University Press, 1973.

______________ Verbal and Bodily Rituals of Greeting and Parting. In The Interpretation of Ritual edited by J. S. LaFontaine. London: Tavistock Publications, 1972, pp. 1-38.

Forsythe, Joe Director of Library Services, Alberta Culture. Telephone Interview: January 8th, 1985.

Foster, Mary LeCron and Brandes, Stanley H. (Eds.) Symbols As Senses: New Approaches to the Analysis of Meaning. New York: Academic Press, 1980.

Frederick, J. N. The Structure of Metaphor. In Semiotica 80 edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1982, pp. 143-153.

Freeman, Eugene The Relevance of Charles Peirce. La Salle, Illinois: Monist Library of Philosophy. 1983.

Friedrich, Paul W. Linguistic Relativity and the Order-to-Chaos Continuum. In On Linguistic Anthropology edited by Jacques Maquet. Malibu: Undena Publications, 1980, pp. 89-139.

Frye, Northrop The Great Code: The Bible and Literature. New York: First Harvest/HBJ edition 1983 (1981).

Gillan, Garth From Sign to Symbol. Sussex: The Harvester Press, 1982.

Gilmore, P. and Galtthorn, A. (Eds.) Children In and Out of School: Ethnography and Education. Washington, D.C.: Center for Applied Linguistics, 1982.

Glazer, Myron The Threat of the Stranger: Vulnerability, Reciprocity, and Field Work. Occasional Paper. Smith College, Northampton, Mass. 1980.

Goffman, Erving Frame Analysis: An Essay on the Organization of Experience. New York: Harper Colophon Books, 1974.

Goodman, Nelson Ways of Worldmaking. Indianapolis: Hackett Press, 1978.

Gordon, Edmund W. (Ed.) Review of Research in Education: 1983 Volume 10. Washington, D.C.: American Educational Research Association, 1983.

Gouldner, Alvin W. The Dialectic of Ideology and Technology: The Origins, Grammar and Future of Ideology. London: The Macmillan Press Ltd. 1976.

Green, J. L. And Wallat, C. (Eds.) Ethnography and Language in Educational Settings. Norwood, N.J.: Ablex Publishing, 1981.

Green, Judith L. Research on Teaching as a Linguistic Process: A State of the Art. In Review of Research in Education 1983 edited by Edmund W. Gordon. Washington D.C.: American Educational Research Association, 1983, pp. 151-252.

Green, Maxine Landscapes of Learning. New York: Teachers College Press, 1978.

_____________ Philosophy, Reason, and Literacy. Review of Educational Research. Winter, 1984, Vol. 54, No.4, pp. 547-559.

Greimas, A.J. and Coures, J. Semiotics and Language: An Analytical Dictionary. Bloomington: Indiana University Press, 1982. (Original French Edition 1979.)

Grimaud, Michael Frameworks for a Science of Texts: The Compleat Semiotician. Semiotica, 39-3/4, 1982, pp.193-241.

Halliday, Michael A. K. Language as a Social Semiotic. Baltimore, Maryland: University Park Press, 1978.

_______________________ Language as Code and Language as Behavior: A Systemic-Functional Interpretation of the Nature and Ontogenesis of Dialogue. In The Semiotics of Culture and Language, Volume 1 edited by Robin P. Fawcett, Michael A. K. Halliday, Sydney M. Lamb, and Adam Makkai. London: Frances Pinter Publishers, 1984, pp. 3-35.

Hammersley, Martyn and Atkinson, Paul Ethnography: Principles in Practice. London: Tavistock Publications, 1983.

Hampden-Turner, Charles Maps of the Mind: Charts and Concepts of the Mind and Its Labyrinths. New York: Collier Books, 1981.

Harris, Catherine Mixed Performances From a Mixed Economy. In Report on the Nation: The Financial Post. Toronto: The Financial Post, Winter 1984-85, pp. 89-108.

Harris, Roy Approaches to Language. Oxford: Pergamon Press, 1983.

Harrison, Randall P. and Wieman, John M. The Nonverbal Domain: Implications for Theory, Research, and Practice. In Nonverbal Interaction edited by John M. Wieman and Randall P. Harrison. Beverly Hills: Sage Publications, 1983, pp. 271-286.

Hashimoto, I. One Artist's Neurosis on Signing. In Semiotica 80 edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1982, pp. 171-184.

Heider, Karl G. Ethnographic Film. Austin: University of Texas, 1976.

Heidegger, Martin Basic Writings edited by David Farrell Frell. New York: Harper & Row, Publishers, 1977.

Hervey, Sandor G. J. Semiotics Perspectives. London: George Allen and Unwin, 1982.

Herzfeld, Michael and Lenhart, Margot D. (Eds.) Semiotica 80. New York: Plenum Press, 1982.

Herzfeld, Michael Signs in the Field: Prospects and Issues for Semiotic Ethnography. Semiotica, 46-2/4, 1983, pp. 99-106.

_______________ Looking Both Ways: The Ethnographer in the Text. Semiotica, Vol. 46-2/4, 1983, pp. 157-166.

_______________ (Ed.) Special Issue: Semiotica Vol. 46-2/4, 1983. Signs in the Field: Semiotic Perspectives in Ethnography.

Hill, Carole E. Symbols and Society: Essays on Belief Systems in Action. Athens: University of Georgia Press, 1975.

Hinde, R. A. Nonverbal Communication. Cambridge: Cambridge University Press, 1972.

Hobart, Mark Meaning of Moaning? An Ethnographic Note on a Little-Understood Tribe. In Semantic Anthropology edited by David Parkin. London: Academic Press, 1982, pp. 39-63.

Hudson, Liam The Cult of Fact. London: Jonathan Cape Paperbacks, 1976 (1972).

Hyde, Michael J. (Ed.) Communication Philosophy and the Technological Age. Alabama: The University of Alabama Press, 1982.

Hymes, Dell Language in Education: Ethnolinguistic Essays. Washington, D.C., Center for Applied Linguistics, 1981.

Ihde, Don The Experience of Technology: Human-Machine Relations. Cultural Hermeneutics 2,1974, pp. 267-279.

_________ The Technological Embodiment of Media. In Communication Philosophy and the Technological Age edited by Michael J. Hyde. Alabama: The University of Alabama Press, 1982, pp. 54-72.

John-Steiner, Vera and Tatter, Paul An Interactionist Model of Language Development. In The Sociogenesis of Language and Human Conduct edited by Bruce Bain. New York: Plenum Press, 1983, pp. 79-98.

Kapherer, Judith L. Socialization and the Symbolic Order of School. Anthropology and Education Quarterly, Vol. XII, No. 4, 1981, pp. 258-274.

Keddie, Nell Classroom Knowledge. (1971) In Knowledge and Values in Social and Educational Research edited by Eric Bredo and Walter Feinberg. Philadelphia: Temple University Press, 1982, pp. 219-251.

Kendon, Adam (Ed.) Nonverbal Communication, Interaction, and Gesture: Selections from Semiotica. The Hague: Mouton Publishers, 1981.

Kendall, Margaret Getting to Know You. In Semantic Anthropology edited by David Parkin. London: Academic Press, 1982, pp. 197-210.

Key, Mary Ritchie Nonverbal Communication Today: Current Research. Berlin: Mouton Publishers, 1982.

King, David Minister of Education, Alberta Education School Library Policy. News Release #29, November 7, 1984.

Kurelek, William Someone With Me: An Autobiography. Toronto: The Canadian Publishers, 1982. Original edition 1980.

LaBaron, John Making Television: A Video Production Guide For Teachers. New York: Columbia University Press, 1981.

LaBarre, Weston Culture in Context. Durham, N.C.: Duke University Press, 1980.

LaFontaine, J. S. (Ed.) The Interpretation of Ritual. London: Tavistock Publications, 1972.

Langer, Susanne K. Philosophy in a New Key: A Study in the Symbolism of Reason, Rite, and Art. Cambridge, Mass: Harvard University Press, (1942). Third Edition 1982.

Lange-Seidel, Annemarie Approaches to Theories for Nonverbal Signs. Lisse: The Peter de Ridder Press, 1977.

Langness, L. L. and Frank, Gelya Lives: An Anthropological Approach to Biography. Novato, Calif.: Chandler and Sharp Publishers, Inc., 1981.

Laughlin, Charles D. and Stephens, Christoper D. Symbolism, Canalization, and P-Structures. In Symbol As Sense edited by Mary LeCron Foster and Stanley H. Brandes. New York: Academic Press, 1980, pp. 323-363.

Leach, Edmund Culture and Communication: The Logic By Which Symbols Are Connected. Cambridge: Cambridge University Press, 1976.

Lemke, Jay L. Thematic Analysis: Systems, Structures, and Strategies. Recherches Semiotiques/Semiotic Inquiry, Vol. 3, No. 2, 1983, pp. 159-187.

Lewis, Joan (Ed.) Symbols and Sentiments: Cross-Cultural Studies in Symbolism. London: Academic Press, 1977.

Lewis, M. and Freedle, R. Mother-infant Dyad: The Cradle of Meaning. In P. Pliner, L. Krame, and T. Alloway (Eds.) Communication and Affect: Language and Thought. New York: Academic Press, 1973, pp. 127-155.

Lindsey, Shelaugh and Sakellaridou, Irini Architectural Semiotic Analysis: A Demonstration. In Semiotica 81 edited by John N Deely and Margot D. Lenhart. New York: Plenum Press, 1983, pp. 387-398.

Lotman, Jurji Semiotics of Cinema. Translated from Russian by Mark E. Suino. Ann Arbor: University of Michigan Press, 1976.

Lucid, Daniel P. Soviet Semiotics: An Anthology. Baltimore: The Johns Hopkins University Press, 1977.

MacCannell, Dean Ethnosemiotics. In Semiotics of Culture edited by Irene Portis Winner and Jean Umiker-Sebeok. The Hague: Mouton Publishers, 1979, pp. 87-98.

________________ A Community Without Definite Limits. Semiotica 31-1/2, 1980, pp. 87-98.

________________ and Juliet Flower MacCannell The Time of the Sign: A Semiotic Interpretation of Modern Culture. Bloomington: Indiana University Press, 1982.

Maquet, Jacques (Ed.) On Linguistic Anthropology. Malibu: Undena Publication, 1980.

__________________ On Symbols in Anthropology. Malibu: Undena Publications, 1982.

Martin, Graham Dunstan The Architecture of Experience: A Discussion of the Role of Language and Literature in the Construction of the World. Edinburgh: The University Press, 1981.

McDermott, R. P. Social Relations as Contexts for Learning in School. (1977) In Knowledge and Values in Social and Educational Research edited by Eric Bredo and Walter Feinberg. Philadelphia: Temple University Press, 1982, pp. 252-270.

McHoul, A. W. Telling How Texts Talk: Essays on Reading and Ethnomethodology. London: Routledge and Kegan Paul, 1982.

McHugh, Peter, Raffel, Stanley, Foss, Daniel C., and Blum, Alan F. On the Beginning of Social Inquiry. London: Routledge and Kegan Paul, 1974.

McKie, Florence Danyluk An Analysis of Symbolic Forms as a Reflection of Human Values in Paul Mazursky's Film "Tempest". Unpublished manuscript, typewritten. 24 pages, 1982.

__________________ Reflections on My Experience Using Videotape Recordings for Data Collection of the Semiotics of Elementary Classrooms. Unpublished manuscript, typewritten 62 pages. 1983.

__________________ Methodological Implications Arising from a Preliminary Ethnographic Inquiry: Within a Speech Pathologist's Office: Therapy Sessions With Adult Aphasics. Unpublished manuscript, typewritten 43 pages. 1983.

Merrell, Floyd Semiotic Foundations: Steps Toward an Epistemology of Written Texts. Bloomington: Indiana University Press, 1982.

Mitroff, Jan. I. and Kilmann, Ralph H. The Four-Fold Way of Knowing. Theory and Society: Renewal and Critique in Social Theory, Vol.10, No.2, March 1981, pp. 227-248.

Morris, Charles W. Signs, Language and Behavior. New York: Prentice-Hall, Inc., 1946.

__________________ Signification and Significance. Cambridge: M.I.T. Press, 1964.

________________ Writings on the General Theory of Signs. The Hague: Mouton, 1971.

Murdoch, Iris The Philosopher's Pupil. (A Novel) London: Chatto and Windus, The Hogarth Press, 1983.

Myerhoff, Barbara and Ruby, Jay Introduction. (Reflexivity as Anthropological Praxis.) In A Crack in the Mirror: Reflexive Perspectives in Anthropology edited by Jay Ruby. Philadelphia: University of Pennsylvania Press, 1982, pp. 1-38.

Nadin, Mihai The Semiotic Processes of the Formation and Expression of Ideas. In The Sociogenesis of Language and Human Conduct edited by Bruce Bain. New York: Plenum Press, 1983, pp. 377-392.

Needham, Rodney Primordial Characters. Charlottesville: University of Virginia, 1978.

________________ Symbolic Classification. Santa Monica: Goodyear Publishing Co. Inc., 1979.

________________ Circumstantial Deliveries. Berkley: University of California Press, 1981.

Okan, Morris A., Fisk, Elizabeth C. and Brandt, Elizabeth A. Dialectics, Ethnography, and Education Research. In The Sociogenesis of Language and Human Conduct edited by Bruce Bain. New York: Plenum Press, 1983, pp. 415-432.

Oliva, Joseph Interpretant and Interpretation. In Semiotica 80 edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1983, pp. 365-371.

Olson, David R. (Ed.) Media and Symbols. The Forms of Expression, Communication, and Education. The Seventy-third Yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press, 1974.

Parkin, David (Ed.) Semantic Anthropology. London: Academic Press, 1982

Pelc, Jerzy Studies in Functional Logical-Semiotics of Natural Language. The Hague: Mouton, 1971.

________________ Theoretical Foundations of Semiotics. American Journal of Semiotics 1. 1981.

Pjatigorskij, A. M. and Uspenskij, B. A. The Classification Of Personality as a Semiotic Problem. In Soviet Semiotics: An Anthology edited and translated by Daniel P. Lucid. Baltimore: The Johns Hopkins Univeristy Press, 1977, pp. 137-156. (Original Polish article, 1967.)

Plummer, Ken Documents of Life: An Introduction to the Problems and Literature of a Humanistic Method. London: George Allen and Unwin, 1983.

Polanyi Michael Personal Knowledge: Towards a Post-Critical Philosophy. Chicago: The University of Chicago Press, 1962 Corrected edition. Original 1957.

______________ and Prosch, Harry Meaning. Chicago: The University of Chicago Press, 1975.

Poyatos, Fernando Interactive Nonverbal Categories: A Reappraisal and Elaboration. In Semiotics 80 edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1983, pp. 407-416.

________________ New Perspectives for an Integrative Research of Nonverbal Systems. In Nonverbal Communication Today. Berlin: Mouton Publishers, 1982, pp. 121-138.

Preziosi, Don The Semiotics of the Build Environment: An Introduction to Architectonic Analysis. Bloomington: Indiana University Press, 1979.

____________ Architecture, Language, and Meaning. The Hague: Mouton, 1979.

____________ Reckoning With the World. In Semiotica 80 edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1983, pp. 407-426.

____________ Relations Between Environmental and Linguistic Structure. In The Semiotics of Culture and Language. Volume 2: Language and Other Semiotic Systems of Culture. Edited Robin P. Fawcett, Michael A. Halliday, Sydney M. Lamb and Adam Makkai. London: Frances Pinter Publishers, 1984, pp. 47-67

Rabinow, Paul Reflections on Fieldwork in Morocco. Berkeley: University of California Press, 1977.

_____________ and Sullivan W. (Eds.) Interpretive Social Science. Berkeley: University of California Press, 1979.

Rauch, Irmengard Symbols Grow: Creation, Compulsion, Change. American Journal of Semiotics, Vol. 3, No. 1, 1984, pp. 1-24.

Regan, Charles E. and Stewart, David The Philosophy of Ricoeur: An Anthology of His Work. Boston: Beacon Press, 1978.

Regan, John Metaphors of Information. In The Semiotics of Culture and Language edited by Robin P. Fawcett, Michael A. K. Halliday, Sydney M. Lamb, and Adam Makkai. London: Frances Pinter Publishers, 1984, pp. 37-47.

Ricoeur, Paul The Hermeneutics of Symbols and Philosophical Reflection, pp. 36-58; and Metaphor and the Main Problem of Hermeneutics, pp. 149-166. In The Philosophy of Ricoeur: An Anthology of His Work edited by Charles E. Regan and David Stewart. Boston: Beacon Press, 1978.

Riegel, Klaus F. The Dialectics of Human Development. American Psychologist. October, 1976, pp. 698-700

__________ Psychology Mon Amour: A Countertext. Boston: Houghton Mifflin Co., 1978.

__________ Foundations of Dialectical Psychology. New York: Academic Press, 1979.

Rossi-Landi, Ferruccio Language As Work and Trade: A Semiotic Homology for Linguistics and Economics. Translated by Martha Adams and others. Massachusetts: Bergin and Garvey Publishers, Inc., 1983.

Ruby, Jay (Ed.) A Crack in the Mirror: Reflexive Perspectives in Anthropology. Philadelphia: University of Pennsylvania Press, 1982.

________ Ethnography as Trompe L'Oeil: Film and Anthropology. In A Crack in the Mirror: Reflexive Perspectives in Anthropology. Philadelphia: University of Pennsylvania Press, 1982, pp. 121-131.

Salmond, Anne Theoretical Landscapes: On Cross-Cultural Conceptions of Knowledge. In Semantic Anthropology edited by David Parkin. London: Academic Press, 1982, pp. 65-87.

Sebeok, Thomas A. Sight, Sound, and Sense. Bloomington: Indiana University Press, 1978.

______________ The Sign and Its Master. Austin: University of Texas Press, 1979.

Seung, T. K. Semiotics and Thematics in Hermeneutics. New York: Columbia Press, 1982.

Shank, Gary D. Seven Manifestos for a Semiotic Approach to Educational Research Inquiry. Paper presented to the American Educational Research Association, Annual Conference, New Orleans, April 1984.

Shapiro, Michael The Sense of Grammar: Language as Semeiotic. Bloomington: Indiana Press, 1983.

Silverman. Kaja The Subject of Semiotics. New York: Oxford University Press, 1983.

Singer, Milton Emblems of Identity: A Semiotic Exploration. In On Symbols in Anthropology edited by Jacques Maquet. Malibu: Undena Publications, 1982, pp. 73-126.

______________ Man's Glassy Essence: Explorations of Semiotic Anthropology. Bloomington: Indiana University Press, 1984.

Skidmore, Arthur Peirce and Semiotics: An Introduction to Peirce's Theory of Signs. In Semiotic Themes edited by Richard T. DeGeorge. Lawrence: University of Kansas Publications, 1981, pp. 33-50.

Smith, John K. Quantitative Versus Qualitative Research: An Attempt to Clarify the Issue. Educational Researcher, Vol. 12, No. 3, March 1983, pp. 6-13.

Sontag, Susan On Photography. New York: Farrar, Straus and Giroux, 1977.

Sperber, Dan Rethinking Symbolism. Cambridge: Cambridge University Press, 1975.

______________ Is Symbolic Thought Prerational? In Symbol As Sense edited by Mary LeCron Foster and Stanley H. Brandes. New York: Academic Press, 1980, pp. 25-43.

Spindler, George The Making of Psychological Anthropology. Berkeley: University of California Press, 1978.

______________ Ethnography of Schooling: Educational Anthropology in Action. New York: Holt, Rinehart, and Winston, 1981.

Staton-Spicer, Ann The Measurement and Further Conceptualization of Teacher Communication Concerns. Human Communication Research. Winter 1983, pp. 158-167.

Steinberg, Charles S. The Communicative Arts. New York: Hastings House, 1970.

Stephens, Max Interpretation and the Sciences of Man: A Question of Generalizability. Theory and Research in Social Education, Vol. 9, No. 4, Winter 1982, pp. 75-89.

Suhor, Charles Towards a Semiotics-Based Curriculum. Journal of Curriculum Studies, Vol. 16, No. 3, 1984, pp. 247-257

Tedlock, Dennis Anthropological Hermeneutics and the Problem of Alphabetic Literacy. In A Crack in the Mirror edited by Jay Ruby. Philadelphia: University of Pennsylvannia Press, 1982, pp. 149-162.

Tiefenbrun, Susan W. Signs of the Hidden: Semiotic Studies. London: H. Charlesworth & Co. Ltd., 1980.

Todorov, Tzvetan Theories of the Symbol. Translated by Catherine Porter. Ithaca: Cornell University Press, 1982 (1977), esp. The Birth of Western Semiotics pp. 15-59.

Tonkin, Elizabeth Language Versus the World: Notes on Meaning for Anthropologists. In Semantic Anthropology edited by David Parkin. London: Academic Press, 1982, pp. 107-122.

Turner, Victor Ritual as Communication and Potency: An Ndembu Case Study. In Symbols in Society edited by Carole Hill. Athens: University of Georgia Press, 1975, pp. 58-81.

____________ Process, Performance, and Pilgrimage: A Study in Comparative Symbology. New Delhi: Concept Publishing Co., 1979.

____________ From Ritual to Theatre: The Human Seriousness of Play. New York: Performing Arts Journal Publications, 1982.

Uexkull, Thure von Semiotics and the Problem of the Observer: Memorial Essay. Semiotica 48-3/4 (1984), pp. 187-195.

Vandenberg, Jan H. *A Different Existence: Principles of Phenomenological Psychotherapy*. Pittsburgh: Duquesne University Press, 1972.

Van Manen, Max Practicing Phenomenological Writing *Phenomenology and Pedagogy*, Vol. 2, No. 1, 1984, pp. 36-72.

Van Zyl, John Towards a Socio-Semiotic of Performance. In *Semiotica 80* edited by Michael Herzfeld and Margot D. Lenhart. New York: Plenum Press, 1983, pp. 99-111.

Veltrusky, Jiri Construction of Semantic Contexts. In *Semiotics of Art: Prague School Contributions* Edited by Ladislav Matejka and Irwin R. Titunik. Cambridge: The M.I.T. Press, 1976, pp. 134-144.

Von Raffler, Walburga *Aspects of Nonverbal Communication*. Lisse, The Netherlands: Sweta and Zeitlinger, 1980.

Vygotsky, Luria S. *Thought and Language*. Edited and translated from the Russian by Eugenia Hanfmann and Gertrude Vakar. Cambridge, Mass.: M.I.T. Press, 1981. (Original edition 1962.)

Wagner, Helmut R. *Phenomenology of Consciousness and Sociology of the Life-World: An Introductory Study*. Edmonton: The University of Alberta Press, 1983.

Watt, W.C. Signs of the Times. *Semiotica* 50-1/2 (1984), pp. 97-155.

Wertsch, James V. The Role of Semiosis in L. S. Vygotsky's Theory of Human Cognition. In *The Sociogenesis of Language and Human Conduct* edited by Bruce Bain. New York: Plenum Press, 1983, pp. 17-32.

Weiman, John M. and Harrison, Randall P. (Eds.) *Nonverbal Interaction*. Beverly Hills: Sage Publications, 1983.

Wilden, Tony Semiotics as Praxis Strategy and Tactics. *Recherches Semiotiques/Semiotic Inquiry*, Vol.1, No. 1, 1981, pp. 1-34.

Willener, Alfred, Milliard, Guy and Ganty, Alex *Videology and Utopia*. Edited and translated from the French by Diana Burfield. London: Routledge and Kegan Paul, 1976.

Williams, Drid Semasiology: A Semantic Anthropologist's View of Human Movements and Actions. In *Semantic Anthropology* edited by David Parkin. London: Academic Press, 1982, pp. 161-182.

Williams, Roy The Impact of Informatics on Social Sign Systems. In The Sociogenesis of Language and Human Conduct edited by Bruce Bain. New York: Plenum Press, 1983, pp. 353-376.

Winner, Irene Portis, and Umiker-Sebeok, Jean (Eds.) Semiotics of Culture. The Hague: Mouton Publishers, 1979.

__________ Ethnicity, Modernity, and the Culture Texts. In Semiotics of Culture edited by Irene Portis Winner and Jean Umiker-Sebeok. The Hague: Mouton Publishers, 1979, pp. 103-148.

Winner, Thomas G. Some Fundamental Concepts Leading to a Semiotics of Culture: A Historical Overview. In Semiotics of Culture edited by Irene Portis Winner and Jean Umiker-Sebeok. The Hague: Mouton Publishers, 1979, pp. 75-82.

Wolcott, Harry Criteria for an Ethnographic Approach to Research in the Schools. Journal of the Society of Applied Anthropology, Vol. 34, No. 2, Summer 1975, pp. 23-44.

Wolffe, Richard J. Children's Rights in Education. The Journal of Educational Thought. Vol. 17, No.1, April, 1983.

Wollen, Peter Signs and Meaning in the Cinema. Bloomington: Indiana University Press, 1984, (1972).

Woolfolk, Anita E. and Brooks, Douglas M. Nonverbal Communication in Teaching. In Review of Educational Research 1983, Volume 10. American Educational Research Association. 1983, pp. 103-149.

Worth, Sol Studying Visual Communication. Edited by Larry Gross. Philadelphia: University of Pennsylvania Press, 1981.

Zigarmi, Drea and Zigarmi, Patricia A Personal View of the Stresses of Being an Ethnographer. Journal of Classroom Interaction, Vol. 16, No. 11, Winter 1980, pp. 19-24.

Zima, Peter Semiotics, Dialectics and Critical Theory: Introductory Remarks. In Semiotics and Dialectics: Ideology and the Text edited by Peter V. Zima. Amsterdam: John Benjamins B.V., 1981, pp. 1-35.

APPENDICES

Appendix 1

Information Letter to Parents (Exploratory Study)

(Composed by Mrs. McKie, approved by the principal
and sent out under his name.)

***

Local School (named)
April 5th, 1983

Dear Parents:

Re: A Request for Permission for Your Child to Participate in a Research Project to be Conducted at L Local (named) School.

The Edmonton Public School Board, through its department of Instructional Processes: Research and Liason, has given approval to Mrs. Florence McKie, teacher, to conduct an exploratory study on Classroom Communication Patterns in our school. The purpose of this study is to identify and to document the richness and variety of communication that occurs between teachers and pupils in elementary schools. With the agreement and cooperation of seven of our teachers, representing each grade level and the special education program at our school, Mrs. McKie will be able to have an excellent sampling for a research project she is initiating under the auspices of the Faculty of Education, University of Alberta, where she is currently studying.

This project has a number of features, all of which are designed to give a different perspective on the topic of classroom communication. Mrs. McKie will be:

1. Observing in each participating classroom for one-half day to take black-and-white photographs of teacher-pupil communication situations.

2. Video-taping for one whole day brief segments of classroom activities. Wherever possible this visit will occur on the day following the first observation.

3. Interviewing teachers individually and as a group.

4. Interviewing pupils: four or five from each grade level to discuss the photographs, selected scenes from the video-taping, and to conduct an informal discussion about communication in the classroom from the children's point of view. Children selected for these activities will be involved in

only one of the three possible formats. The interview will be limited to a maximum of thirty minutes with any one pupil. Younger children will be involved for 15-20 minutes unless their interest and participation is particularly enthusiastic.

It is necessary for Mrs. McKie to obtain parental permission for children participating in the study. We would very much appreciate your completing and returning the enclosed permission form as soon as possible.

Mrs. McKie has indicated that she would be pleased to discuss details of this study and/or the subsequent findings with any one interested. She may be reached at (phone number) after 6:00 p.m.

Yours truly,

(signed
Mr. Principal
Local School

***

Note: The information letter and permission request sent for the major study which took place in Mrs. Wayne's grade four classroom in another elementary school was similarly worded except that my
involvement was indicated as follows:

1. From September 1983 to January 1984, Mrs. McKie will visit regularly to observe teacher-pupil interaction during classroom activities.

2. During this time, she will conduct informal interviews with children who volunteer to discuss classroom communication with her.

3. Classroom activities will be video-taped during intervals between November and May.

4. Children who volunteer for "on camera" interviews or to "act as a teacher" will be video-taped during May.

Appendix 2

Permission Form for Pupil Participation in the Local School-McKie Research Project

I/We ______________________________________
(name of parents or guardian of the child)

give/do not give permission for ______________________
(circle one) (name of child)

to participate as a class member in the Local School-McKie Project on Classroom Communication. I have read the explanatory letter and understand that the photographs, video-tapes of the classroom activities, and the video or audio-tapes made during individual pupil interviews with Mrs. McKie will only be used for educational purposes.

Further, I give permission for ________________
(name of the child)

to participate in any one of the following:

1. Interview based on photographs of classroom activity
(to be audio-taped) YES NO
2. Interview based on scenes from classroom video-taping
(to be audio-taped) YES NO
3. Informal conversation with Mrs. McKie concerning classroom communication between teachers and pupils.
(to be audio and/or video-taped) YES NO

Date:__________ Signature: ______________________________

Phone:______________

Appendix 3

Teachers' Confirmation of Scheduling for Local School-McKie Research Project
(Exploratory Study only)

Teacher:______________________ Grade:______ Room:_____

Many thanks for your cooperation in participating in my Classroom Communication Project. This note is to confirm the dates and times to which you have agreed:

1. One-half observation Date:__________
   (to include still-photography) Time:__________

2. Whole-day visitation and video-taping 8 segments of classroom activities at approx. 9:00,10:00,11:00, before noon and opening p.m., 2:00: 3:00, and before closing. Date:__________
   Will arrive about about 8:30 a.m. to check lighting and prepare camera.

3. Interview with Pupils:

   a. One pupil for still-photography discussion Date:________ (given)
      Name:___(given)_______ Time: 9:00 a.m.

   b. Two pupils for video discussion Date:__________
      Name:________________ Time: 9:30 a.m.
      Name:________________ Time:10:00 a.m.

   c. Two pupils to be interviewed and video-taped re: informal conversation about teacher-pupil communication in general.
      Name:________________ Time: 10:45
      Name:________________ Time: 11:15

4. Personal Interview with Teacher: (1-2 hours)
   (To discuss samples from video-tape and general communication topics)
   Date:__________________________Time:______
   Place:____________________

NOTE: If anything should come up that would make a change in the times above more convenient for you, please call and/or leave a message at (phone number), or see me at the school. Many thanks for participating in this project.

signed

Appendix 4

Kindergarten Observation and Video-Tape Analysis

Video-taped April 1983 Analyzed: June 16,1983
Tape #KC6007 @ 304-340
Five brief consecutive "events": Total time = 4 minutes

Context: Children in Free-PLay

Sixteen children are at various stages of completing a colored-pieces "mosaic" of Arrow To the Sun, a story read to them by their teacher just prior to this activity. (Six children of this group are complete "totem poles", yesterday's project, before going on to work on their mosaics.) As individual children complete their pictures, they engage in "free play", a self-selected activity in one or more of the various activity-spaces around the room, e.g. library corner, cooking centre, sand-box, water-table, and shelves and counters around the room with thematic collections e.g., hats: fireman's, police, clown's, etc.; Fisher-Price airport; trucks, cars and graders; stuffed animals etc.

This observation is limited to the play that occurred on the climber, a open-runged, flexible wooden unit that the children use imaginatively or matter-of-factly. It is about 2mx2m with a slide attached to one of its four sides and extending beyond the core structure.

Bobby is already "inside" the climber, sitting on one of the several large vinyl pillows scattered there. Erika comes to the climber-area, moves the slide panel (1.5m) long to a lower rung of the climber structure (this lessens the pitch of the slide). She giggles as she does this, and looks at Bobby who gets up and struggles with the slide from the inside as if to move it, but can't. It appears to be a challenge that they have been involved in before.

1.

Erika: Ha! Ha! Boys can't do it! {walks around to the slide of the climber, climbs up a set of rungs to the top of the climber, and stretches out on her stomach on the slats}
Bobby: So what? {climbs rungs from inside, reaches the top where the slide adjoins the climber} Look at this! {walk-runs down the slide}.

Erika: {watching him} That's good!

Bobby: I better go back inside. {ducks under the rungs and gets inside, crawls around}

Erika: {watches him from her perch above}

[Both look up at sound of the teacher's raised voice, but almost instantaneously recognize that she does not include them in her comments, and return to their own play.]

Bobby: {putting two vinyl pillows on the floor to make a bed} I'm tired....I think I'll go to sleep.

Erika: Me too. {puts her head down, but peeks over the edge to watch Bobby settle in}

Bobby: Good-night. {closes his eyes}

Erika: Good-night. {closes her eyes}

Bobby: ...{looking around from his pillow, suddenly changes his mind and gets up} I'm going to climb up there. {begins climbing the slide}

Erika: {watches him}

2.

Laura: {During this time, Laura has completed her picture, shows it to the teacher, rushes to put it on the counter, and runs to the climber} I'm going to play too.

Bobby: Okay. {removes pillow from floor}

Laura: {picks up another one, then sets it down again}

Erika: {still sitting on the top, shunts herself further back} I better get up here. {centres herself on the slats above them}

Laura: {to Bobby} You shouldn't drop the bars. {picks up a board [bar] and adjusts it to join the two opposite sides of the climber} How do you like this?

Bobby: {smiles, has been holding a pillow high so Laura could place and adjust the bar into position, puts his pillow on the bar and climbs on} Whee!...Like this. Look at this!

Laura: {lifting her pillow,.struggles, places it in front of Bobby's, making a bench} All right.

Bobby: {tugs at one end of Laura's pillow to adjust it better}

Laura: Thank you. {climbs up on her pillow, bumping her foot into Bobby's thigh}

Bobby: {grinning, pummels Laura, waving his head from side to side}

Laura: {cowers, flinches, but laughs} Oh help! {in pretend-dispair} Help!

Bobby: {suddenly stops "beating her" as his pillow partially slides out from under him and pitches him to the floor}

Laura: {slides off her pillow too but ends up standing on the floor between the bar and the "wall"}

Bobby: {gets up very angry and hits Laura on her arm} Where's my pillow?!

Laura: {ducks away, throws out her arm to stop Bobby hitting her...touches her pillow} Only mine.

Bobby: {holds an angry stance, glares at her, grabs for her pillow}

Laura: {pointing above to Erika} Erika has it! {reaches out to save her pillow, but Bobby flings it to the floor}

Bobby: {throws himself down on the [Laura's] pillow}

Laura: {sees Bobby's pillow at an angle between the bar and the wall, pulls it out and sets it right again}

Bobby: {kicking at her legs}

Laura: Quit it! {straightens the pillow on the bar}

Bobby: {hits out at her with his arms from his lower position}

Laura: {steps out of his reach, looks at him with a long look}

Bobby: {turns his face to the pillow and is still}

Laura: {continues to adjust the pillow and sees David coming}

3.

David: {climbs up the slide on his hands and feet}

[Loud conversations from other children around the room]

Laura: {looks up and around the room, dismisses the sounds, climbs up on the bar, struggles, holds onto wall rung to lift herself up and climbs inside rungs}

David: {face-to-face with her at the top of the slide} I'll be the guard.

Laura: {climbing higher} No!

David: Okay. You can be the guard.

Laura: I'll be the baby. The baby.

David: {slides down the slide backwards on his stomach}

Laura: {climbs over the top rung and slides down}

[They move off to the play-house. Bobby stays curled up on his pillow. Erika is still on top of the climber.]

4.

Erika: [Sits up, pulling herself up by holding onto a "wheel" (with extended spokes) that is attached to the climber.

Drops her feet between the slats and rotates the wheel with her left hand. Suddenly stops, pulls her hand away quickly and holds it close to herself.

Looks at her finger. Touches it with her right hand. Grimaces. Clutches her left hand to her stomach, covering it with her right hand. Looks up and across the room. Curves her shoulders in and rocks back and forth. Puts injured finger in her mouth, still looking across the room. Sucks on finger. Suddenly withdraws it, shakes it vigorously, looks at it while turning her hand slowly. Face tension eases.

Gives finger a quick lick and turns abruptly to the wheel again, and rotates it back and forth. As her arms cross with each full turn, she reverses direction. Rotates wheel very rapidly. Flashes a smile to someone below joyously singing "A-hunting we will go..."

Appendix 5

Transcript of Video-taping of Kindergarten Girl Acting as Teacher
Filmed May, 1983

Annette: {standing at the blackboard in an empty room faced an imaginary kindergarten class}
We're going to learn how to make a couple of words...Okay?
{turns to blackboard} The first one is going to be "mom".
{writes }, That's "mom". Now "dad".
{writes }, then steps back, turns to face the class {camera}, points across her body in the direction the the blackboard} That's Dad.

{turns to the blackboard} Now we're going to...The third one is going to be our name, okay? {writes , steps back, points to it} Okay, that's one of the names. Now here's...going to...Now watch how I spell my name. {writes her own name} Okay. {still facing the blackboard}... Now I'm going to write some numbers and you guys have to tell me what number it is.

{writes } Okay. That's "one". {erases it}

{writes } That's "two". {erases it}

{writes } That's "three". {erases it}

Now let's write "four". {writes }

***

Annette: (sitting on a low chair, as teacher)
Okay, we're going to do some...What songs do you want to do?...(scans imaginary class) Okay, let's...You don't know a song?...Okay, I'll think of one...(looks at the ceiling, the camera, around the room, thinking) Why don't we sing: Head, Shoulders, Knees and Toes? Okay?

(leads the action and sings the song are usual speed)
Medium....
(leads action and sings song a little faster)
Fast!...(does action and sings as fast as she can, giggles at the end of it)

***

Annette: {standing in front of the imaginary class with papers in her hand} These are some papers that Mr. Principal said I had to pass out, so I'm going to pass them out.

{moves between desks, distributing the papers, one on each desk} And don't fool around, you guys...

{finishes distribution, returns to front of the room and sits on a stool} Okay. Time to go home now...but...

{to camera}...I'm pretending there's a field trip tomorrow...

{to class again}...and there's going to be a field trip tomorrow, and you have to come when the morning kids come and try to make it at...?

{to camera}...What time do we usually come there? The kids in the afternoon?...

[About nine o'clock, I think.)

{to class again} You have to come about nine o'clock. Okay...Good-bye...

Appendix 6

Transcript of Video-taping of Grade III Girl Acting as Teacher
Filmed May, 1983

Shannon: {enters her empty homeroom classroom from doorway} Good morning, class. {comes to the front of the room with a spelling workbook opened} Now take out your books. Turn to page 14. There you have to read another story and put down some sentences and put down your name on the paper.

{sits on a high stool at the front for a moment, moves between the desks checking the work of the imaginary children} That's coming, Mary. {looks at other desks, goes down another aisle} You're going to have to stop talking, Bobby, and settle down and do some work. {returns and sits on stool}

***

{marking at an empty desk, speaking to an imaginary pupil at her side, and handing some papers back} You've got yours all right.
{leaves desk quickly, goes to front of room, holds open book} Turn to page 24, class. Here you have to do some...some plus-ing and minus-ing...try to think if you can.

***

{accepting a piece of artwork from an imaginary pupil} Oh, thank you! It's beautiful...I think I'll just hang it up on the wall. {mimes hanging it up}

{resumes position in the front of the class} I'm proud of you. That's nice art, and today...instead of finishing math...you can do it as homework...you can go out for recess early.

***

{standing at pupil's desk, scolding} John! Stop your talking. {returns to stool, looks over class, responds to presumed request from pupil} Yes, you may...
{glances toward John, smiles}
{gets off stool, goes to John's desk

{louder voice this time) John! Be quiet!
{leaves abruptly, returns to stool, scans, looks at John seriously} John!
{walks over briskly, stands at 90 degree angle to his desk, hands on her hips} John? Do you want to go out in the hall?...{softly but firmly} You better be quiet. {hands down from hips, goes to stool}

{scans class, and looks back to John's direction, purses lips...} John...
{walks to his desk with decidely firm steps, arms across her chest as she nears} That's it, John. {gestures to take him by the arm} Come on, let's go to the hall.

{firm march to door, opens it, flings out arm [John?] into hall, and looking down [at John]} And stay there...(much softer)...until I tell you you can come in. {closes door}

{returns to stool, sips from an imaginary cup of coffee}
Yes, Mary?...Fine...You guys are finished now. You can go out for recess. Okay, class dismissed!
{follows imaginary children out, stops at John still in the hallway) John, come in the classroom. [John apparently walks in with her] Sit down in your desk. {walks over to desk with firm tread, stands slightly behind where John would be sitting, left hand on hip} You've been a bad boy....Do you want to go to the office?...Okay, then. Be quiet, and then you can go out for recess.

Note: The teacher, whose student this is, viewed the scene on video. She was equally amused and dismayed that the mimicry could be so accurate. It is important to recognize that when these children were asked to "pretend to be a teacher", neither their homeroom teacher nor any other teacher was named. Yet repeatedly one senses that that is the person they have incorporated into their present interpretation of "teacher". It is equally apparently that in the "acting" the children lose self-consciousness as "actor" and literally "become" the teacher.

This transcript of a spontaneously created "teacher" portrayal seems to point quite clearly to the impact of the teacher's influence on a child's interpretation of school life. The comprehensiveness of the "modelling" by the child suggests that the "model" the teacher presents to the child is potently and implicitly absorbed.

Appendix 7

Transcript of Video-taping of a Grade Six Girl as Teacher
Filmed May, 1983

Diane: {standing at imaginary pupil's desk, talking to pupil} That's a good story....Just don't use as many words...that is, don't use "and" over again that much. Try to use different words.

{going to another desk, stops, looks down at imaginary book...long pause...looks at book again...is silent for a moment...points to book} Did you...?...Ah...It's not going to be a strong sentence.
{pause, as child answers?}
...That's better. Yeah. You're using too many "ands" in one sentence. You can't say "and" that much...Yeah...It's boring, that's why!

{smiles}...Okay, that's it. Take off the last one, also the dots... That's it. That's good!

***

{addressing the class prior to group work} This row can have the corner over there {points}. This one, behind there {points to library corner} and this row can stay. {points to their desks}

...You're supposed to start your research for the animals your groups have chosen. {hands together in front} You can decide whatever you want to do. And if there's a fight, you just have to vote or something.

{checking at group #1} How is it going?...Oh?...Okay, you have to find research books on it. And you're going to have to write out your research on your own....When you're finished, you'll do an outline, but you probably won't finish today...Okay?...

{at group #2}...We...we have some books at the front. What don't you go look at them? You might find some pictures. You have to do things like...like their life-span, what they eat, their population...things like that. The encyclopaedia will probably have that.

> {at group #3} Are you doing a puzzle? For an interesting topic, you'll have to go to the library for some books... Why don't you?...Okay, does any one know what it is?...Well, if you don't know what it is, I give you permission...You can go to the library right now....Hmm, okay? {smiles} Okay.

Note: In an eleven-year old girl's voice, we can hear the basic philosophy of her teacher: his attitude toward the children, the control and freedom practised in his classroom, the degree of dependence and interdependence encouraged, and the kind of direction and encouragement given. There is a sense of individualization and recognition in the words spoken and in the intonations given them. It is also interesting to note the myriad of details that Diane gives attention to in her portrayal of "what a teacher does" and the fact that she invites her imaginary pupils to extend their investigations into the library as well as to the resources within the classroom.

Appendix 8

Transcript of Grade VI Boy
Acting as Teacher
Filmed May, 1983

Concept-Teaching Sample

[Gary, I'd like you to pick a topic, any topic, that you might teach to a class. First, what grade would you like to teacher?]

> Gary: Well...I guess...maybe, grade three.

[Fine! I'd like you to take some topic that is very familiar to _you_ and then pretend that the children know _nothing_ at all about it. Think about it a minute...whenever you are ready.]

> Gary: {standing at the blackboard, looks at camera, looks toward where class would be} Good afternoon, class! {smiles broadly, head tilts to the right.} Today we are going to be....{shakes head slightly}...Guess what we are going to be doing today?
>
> {turns to bbd, picks up chalk and in very large capital letters, writes CATS and underlines it, puts chalk down, turns and smiles} Cats! There are many...there are very many different _cats_...Who has cats in this class? {tucks chin in and raises quickly as he says} Oh, you have a Siamese. {chin tuck} Oh, okay. {turns 3/4 toward class, pauses}

[You know what, Gary? I am not going to let you have that advantage. I am going to insist that they do _not_ know what a cat is. They don't know if it is a box or a building or a cloud. Okay?]

> {listening with a held smile, turns to class, takes deep breath.} Who knows what a cat is? {puzzled look} A...a type of building? {sharp swing of jaw to left} Mmm. Not really. {looks at class} A plant? {chin leads face slightly away to right, mouth closed, eyes slightly narrowed} No. No. {shakes head several times, chin raises} Hm? Some type of animal? Very close {head to left, mouth slightly eschew, eyes from left angle to child}...but...{head levels and then tilts slightly to left again} What family does it come from? {eye at fixed position} From the dog family? No, not quite. That's...

{shakes head ever so slightly, steady look at class, chin raises.} That's right. From the lions.

{head tips to left} How did you know that? {head angled still further} Oh, your mom told you? {smiles at child, nods} Oh?...{firmer voice now} Well, there are many different types of cats. There are Siamese cats {flashes huge grin to camera} There are big cats. {eyes cast down briefly and then up at class} And there are tomcats. We've got all sorts of cats. {stalls a little, looks horizontally to left, looks into camera, puts finger to side of mouth, watching me]

[Gary? I'm a student. I don't understand, so I ask: What is a cat?]

{purses mouth a little} Oh? A good question. A cat is a {lifts right hand with fingers spread open}...animal that is like a...{pauses} Has anyone here seen a lion? IIn a pciture book or something? Well, it's like a dog except it's...it's a different kind of animal...{fidgets} Some people have pets and other people...and other cats are wild animals. {serious look on face, directly at class} So-o-o...{look at camera for a fraction of a second}... {swallows, wrinkles nose} Well...{shrugs, waves head lightly} Well, it can be a nice animal as well as it can be a real mean animal, scratch you...{looks tired now, head slow tilt to left, arms extended at his side}

[{mimicing child's voice} What does it look like?]

{shoulder drops slightly, strong tilt of head to left, sighs, turns to blackboard, picks up chalk} Here. I will draw it. On the board. {writes with left hand, draws horizontal "u", quickly erases it, puts brush down} This isn't going to be a good drawing. {touches chalk to board, draws 3/4 circle with inner curved line} Oh! {reaches for the brush, erases briskly, puts brush down, turns to class, smiles, head tilt to left] Well, I'll skip the drawing!

{turns fully to face the class, talks seriously} Most are very small animals. And if you are looking at your pet {small shrug}, it's got ears. And some are different colors {waves left hand outward} It could be black or white. Whereas others {looks to ceiling} could be orange...or just a plain white by itself. {body shifts left and back} Hm? {eyes close slightly} Most of them are very small but... {head tilts left} The ones that are called tomcats...most of the time...are usually big cats

> and are usually strays. They have lots of fur usually {big smile}...and has...a...a tail...on it. Quite a big tail, actually. Quite a long tail.

[(as student) Does it look like a monkey?]

> {mouth wide open} Ummm? {shifts from side-to-side several times} Well, it doesn't walk like a monkey. The tail might look quite a bit like a monkey's {head tilts to left, levels} and the face basically...{looks to right} But umm? {pauses...} And..except it has a lot more fur on it. Than a monkey does. {looks right}...{very briskly} And it doesn't walk like a monkey. It walks on all four legs. {stops}.

A full analysis of the pedagogical implications embedded in Gary's portrayal of a teacher is not undertaking here. However, a number of points will be highlighted:

In the artificial challenge presented to Gary, it is evident that a spur-of-the-moment conceptualization of a content lesson is a difficult task for Gary (as it is for some teachers). How do you teach something you know very well to someone who has no basis for understanding those ideas? Interestingly, Gary's first question to the children is, "Who has cats in this class?". It is a question that immediately tries to "link" into the children's world. Attempts at establishing these links appear throughout his struggle to clarify the concept of cats for the children. In his unsuccessful "drawing" of a cat, we see his turning to another semiotic form to help bring meaning to the children. That it is abandoned is not as important as the fact that Gary felt the need to use more than words.

In Gary's nonverbal language too, we find the semiotics of confirmation, suspended acceptance, negation, puzzlement, a feeling of success, frustration, etc. that are an inherent part of any teacher's repertoire of meaning-carriers. Extended analysis would probably reveal a pattern of head movement that has a particular meaning that the children would absorb and understand. These nonverbal head gestures appear to precede or "announce" the teacher's verbal response. A comparison with how children who are blind anticipate teacher-meaning might highlight the taken-for- grantedness of others' instantaneously interactions of multiple sign systems.

Finally, Gary's retreat into words is also typical of teaching--trying to create meaning solely through abstraction or symbolization. The fragments of "sense" that might be collected sequentially from Gary's comments (teaching) show that the "wholeness" of the concept of cats would be far from complete for any one with no familiarity with cats. Yet, it is often from just such patterns of random and partial explanations that many children are expected to learn.

Appendix 9

Transcripts of a Grade Six Boy Acting as Teacher

Filmed May 1984

The Nonverbal Semiotics of Praise and Disapproval

[Teachers usually give an assignment and then go around and see how the children are doing. Will you pretend to be a teacher checking the children's work?...You find one who has done a super exercise. You know, the kid that has really done everything right! And in the other one, this kid has it all wrong!]

Colin: He's really lazy and like that..?

[Right. That kind! Okay? One super and one not-so-super.]

Shall I just walk up to the desk?

[Right. Except that you have to turn to me, to the camera]

So I'll go over here.

[Great!]

Colin: {steps back a bit, hands behind his back, approaches desk, looks at work, head leaning over desk, hands still behind back, in very pleased voice} Oh! {steps to side of child, 3/4 body angle} What's this is all about? {nods with chin} Oh, very nice job! {hands released and now on edge of desk, looks nodding emphatically, speaks slowly} Oh...that's very nice, the way you did your sentences {pointing with index finger to the imaginary page} Hmm! {finger taps in time with speech} Very good structure.

{reaching over to other page} Oh, what a nice picture. {broad smile, quick jerk of head to right and back} Boy, you did a good job! { leans over slightly and with left hand checks work with flourish, leans to look closer, adjusts left hand along edge of desk as he backs one step} Good report. {angles to look at child's face} Good job! {quick nod, smiles, moves forward and away, trailing right hand on desk top}

{goes to first desk in row beside, takes 3/4 angle position, hands on desk edge nearest, looks at page, continues to look there while saying} W-e-ll- you could have done better...as far as your writing here. {quick curved gestures across page corner} How come it is just one long sentence? No...? How come it's not broken up into small sentences {stern look, mouth-line straight, thumb of left hand twirls slightly}

Oh? You should have...you could have done better than that. {as if looking at child, voice louder} You just did it in the last ten minutes? Why? {shakes hand in short downward strokes as he speaks} Because you didn't finish it for homework? Well, that's not too good. {licks lower lips, closes mouth firmly} Well, Bradley {head shakes slightly} I can't give you a good mark for this. I am disappointed. Okay? {Sighs}...Not too good.

Appendix 10

Grade Four Girl's Reaction to Acting as Teacher
Conversation After Video-Taping Her
January, 1984

[I'm not video-taping the children acting as "teachers" until May, so I am so glad you reminded me that you wanted to do that before you moved...How did you feel when you were acting as a teacher?]

> Lindsey: It was kind of embarrassing when people came in, but...um...when everybody'd gone and you were just filming me, it was exciting! And it was a good eexperience to...uh...you know, let your feelings out. What you feel for being a teacher.

[Oh. So, it wasn't a hard thing to do?]

> No!

[Earlier Mrs. Wayne said, "My goodness, how can she do that...when there are no kids here?]

> (self-deprecating) hmm?...(as if it was self-evident) You pretend that there are kids there.

[How did you know what to say or what to do?]

> Well...by...sort of by being in school...sort of like Mrs. Wayne does.

[So it was pretty much Mrs.Wayne who was your model for this, was it?]

> Hmm.

[But how did you know what to say so quickly? You didn't have to pause at all. You just did one thing after another.]

> {smiles}...Well, because Mrs. Wayne just goes: "Okay, put away your math. We'll do spelling." Or sometimes she just waits... Sometimes...you just...something pops into your mind and then another thing pops into your mind! So [when you are acting] you just go: "You do spelling..." and then if you've only got two words done, "Okay, we are going to do language arts now." Cause if you wait,

you are going to forget it! And you'll sit there going "Ummmm? {laughs}

[So all this is happening in your mind while you are acting. While you are getting ready for what would be next?]

Yeah!

[That's really interesting. You have two roads going in your head?]

{laughs}

***

[Would you ever consider being a teacher?]

Yeah. I talked to my Mom and I said "I would like to be a teacher when I grow up."

[Why?]

Oh, because I like working with little kids.

[Do you think you would be a good teacher?]

I don't know!

Brian: (standing nearby, now moves closer) Do you like babies?

Yeah.

Brian: I think you would probably be a better play-school person. I like little boys and little girls.

Lindsey: (continuing) I think I would like to teach a nursery in the hospital. Like working with babies.

[Maybe a nurse would be closer to what you want?]

Yeah....Or! I would want to be a model or a dress designer. That is what I have been thinking of doing when I grow up.

[Oh, so you have a lot of possibilities.]

Yeah.

***

[Tell me, what makes a good teacher.]

Lindsey: Well, when...um... when...well, just being strict and not telling the kids "Okay, you can chewing gum." Like not letting your kids get out-of-hand. Like if they are constantly talking, you should just express your feelings to them, or say what you know or feel so they won't think..."Well, she thinks we can do that."

[Oh. So if they are talking to each other and communicating, that is better?]

Yeah!...But *no*, I don't think it's better...like the teacher, if she doesn't do anything about it, they are going to think that she's going to allow that. And they are just going to keep on doing that and when you get back, you are going to yell at them and they won't know *why* you are yelling at them because you didn't say anything when they *first* started talking.

[So, to be fair, does the teacher have to let you know what the rules are?]

Yeah!

[Are all teacher's rules fair?]

Well, yeah. Mostly all of them.

[What might happen sometimes, in everybody's classes, that may not be quite fair?]

Well, the teacher...she will help another kid...and she'll just go: "You can figure that question out." And when she plays more attention to one person in her class.

[So you think that everyone should have a turn?]

Yeah. {looking rather anxiously at Mrs. Wayne making her way to the front of the room}

[Well, I think you would be a very good teacher. You did a nice job of the video. Thank you.]

Okay. Bye! {Hurries over to her desk and sits down}

[Mrs. Wayne begins the afternoon session.]

*

To Lindsey and her classmates,
to Mrs. Wayne,
and all the other teachers and children
who participated in my study,
my deepest gratitude.
From your signs,
may we learn
to be wiser
teachers.